
MEDICAL REPORT

ON

DYSENTERY.



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OF THE

WHITWORTH HOSPITAL,

CONTAINING

AN ACCOUNT OF DYSENTERY,

AS IT APPEARED IN THE LATTER END OF 1818.

FROM VOL. III. OF THE DUBLIN HOSPITAL REPORTS AND
COMMUNICATIONS IN MEDICINE AND SURGERY.

BY J. CHEYNE, M. D. PHYSICIAN GENERAL, &c.

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INDUSTRY;

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By J. CHEYNE, M. D. F. R. S. Ed.

PHYSICIAN GENERAL TO HIS MAJESTY'S ARMY IN IRELAND, &c.

IN former times dysentery was more frequent in Ireland than it is at present. Among the febrile diseases to which this country was liable, it stood in order of frequency next to continued fever, which is called by Boate the Irish ague. Boate, in briefly treating of the diseases “reigning in Ireland, and whereunto that country is peculiarly subject,” dedicates his first section to the Irish ague, and his second to the looseness, which, he says, “doth greatly reign in Ireland as well among those of the country as among strangers, wherefore the English inhabitants have given it the name of the country disease. Many are a great while troubled with it, and yet get no other harm; and those that betimes do make use of good medicines are without any great difficulty cured of it. But they that let the

looseness take its course, do commonly, after some days, get the bleeding with it, whereby the disease doth not only grow much more troublesome and painful, but a great deal harder to be cured; and at last it useth to turn to the bloody flux, the which, in some persons, having lasted a great while, leaveth them of itself; but in far the greatest number is very dangerous, and killeth the most part of the sick, unless they be carefully assisted with good remedies."

The havock made by this disease in the 17th century vindicates the propriety of the term used by Sydenham, namely the "Endemic dysentery of Ireland," and entitles the flux at least to the second rank among the *leaguer* sicknesses of that unhappy time. We find by the following note in the life of Anthony a Wood, that dysentery existed at Drogheda after the storming of the town by Cromwell: "Whereupon Thomas Wood, brother of Anthony, going into Ireland, he became an officer into the regiment of Colonel Henry Ingoldsby, against those that were then called rebels; where, at Tredagh, he ended his days of the country disease called the flux, Anno 1651." At the siege of Londonderry, *intra muros et extra*, both in the garrison and in James's army, the looseness, as we learn from Mr. Walker's account of the siege, caused great havock; and at Limerick, which, as Trim says "lies in the middle of a devilish wet swampy country," many of King William's army fell a sacrifice to the dysentery."

It appears from the writings of Rogers and O'Connell that dysentery was common in Ireland in the earlier part of the 18th century, more especially in the years 1708, 1718, 19 and 1740, in which years, especially 1740, a fever prevailed which resembled in its causes, nature and universality, the epidemic fever of 1818.

In examining the annals of the Army Medical Board in Ireland, I find that the troops were much more liable to dysentery about two or three and twenty years ago than they are now, the change in this respect being probably owing to a great improvement in the Barrack and Hospital systems which has taken place since that time, and to the improvements which have taken place in the soldiers' dress. It appears from the valuable records of the Medical Board, that English and Scots regiments were generally more or less affected with dysentery, in many of the principal military stations, upon their first coming to Ireland, which well agrees with my recollection of the health of these troops at that period. The following, among many other notices of the same nature in the Medical Reports of the army, will show the prevalence of dysentery about the period of time alluded to.

The dysentery prevailed in the encampment at the Naul, which is about twelve or fourteen miles north of Dublin, during the autumn of 1796. It committed considerable ravages among the regiments of the Irish Brigade, quartered at Cork pre-

vious to their sailing from Cove in October 1797. It broke out among the soldiers of the Herefordshire regiment of militia at Carrick-on-Suir in 1798, in the Guards at Limerick in 1799, and about the same period in many other corps, which it would be unnecessary to specify, quartered in different parts of Ireland. The places wherein it prevailed most among the troops were Cork, Limerick, Waterford, Carrick-on-Suir, Fermoy, Athlone, Clonakilty, Belfast, Enniskillen. In the account published by Dr. Barker and myself of the Epidemic fever of 1817, 18, and 19, the reader will find at p. 15, vol. I. a proof that the dysentery prevailed to a great extent in Waterford at the beginning of 1800; and with regard to the frequency of dysentery in 1801, the following statement in the report of the Army Medical Board in November is conclusive: "About the middle and towards the end of September 1801, a dysenteric complaint made its appearance among the troops, and the latest accounts afford satisfactory evidence that, from the above period to the present day, the progress of the disease has been uniform and extensive throughout every part of the kingdom; in many cases the symptoms have assumed an unusual degree of malignancy, and in a few the termination has been fatal. The disease has been attributed to the long continuance of dry hot weather, followed by a change of temperature, and a considerable fall of rain." From the foregoing extract it would appear that dysentery arising at this period towards the end of the epidemic fever which occurred in 1800 and 1801, and becoming general,

bore the same relation to that epidemic, that the dysentery which prevailed in the autumn of 1818 did to the epidemic fever of 1817, 18.

The principal object of this paper is to describe dysentery as it was witnessed in the Hospitals of the House of Industry, in Dublin, in the autumn and winter of 1818. It will not however be uninteresting to establish that the disease was not confined to Dublin, but existed in the same form about the same time in Kilkenny, Clonmell, Limerick, Waterford and Cork, and perhaps it existed in other places, from which I have not been able to obtain satisfactory accounts.

By a letter from Mr. Pack, surgeon to the Fever Hospital in Kilkenny, it appears that dysentery was more prevalent in that city in the latter end of 1818 and beginning of 1819, than during any period within his recollection; and he states that the number of patients convalescent from fever who were attacked with dysentery, was often such as to oblige the medical officers to appropriate an entire ward of the Fever Hospital for the reception of the dysenterics.

Mr. Dillon, surgeon to the Clonmell dispensary, reports that dysentery was very prevalent in Clonmell in the autumn of 1818; that it frequently appeared as one of the sequelæ of fever; that it also prevailed to an alarming extent in those who had not been affected with fever; that it seemed to him contagious, and that at one period the mortality from

dysentery was as one to ten. I learn from staff-surgeon Eagle that a few cases of dysentery occurred in the 16th lancers and 97th regiment at Clonmell, in August and September 1818, but of late years, as this gentleman observes, dysentery has not prevailed among the troops in Clonmell or Kilkenny to any extent worth remarking.

In the following interesting communication from Dr. Geary, a correspondence is shown in the season at which dysentery appeared in Limerick, in the severity of the disease, and in its connection with fever, but a difference is observable in the year. Dr. Geary says that dysentery first appeared as an accompaniment to the epidemic fever in September, 1817; in November it was most fatal. At that period numbers both in town and country, as well as in the Fever Hospital, were affected with the disease. In January 1818, the use of the General Military Hospital was obtained from Government, to which, when the males were removed, almost every individual was seized with the complaint, which seemed attributable to the dampness of the house. The mortality during the first three weeks was 38. This, however, was checked by keeping up good fires in every ward. The dysentery was more observable among the poor as an attendant on the Epidemic fever than in the higher orders of society. It frequently arose during convalescence from fever, and in such it was most severe; in these it was in general connected with rigors, with sudden and fixed pain in the bowels, which mostly yielded to bleeding

and purgatives. The disease began to cease in the the month of March 1819.

After the particulars, which have been given by Dr. Bracken, of the state of disease in Waterford, in a work already alluded to,* it would be unnecessary to dwell on the prevalence and great mortality of dysentery in that city; I shall merely state that I have now lying before me a report from Dr. Poole of Waterford to Dr. Renny, which, while it confirms Dr. Bracken's statements respecting the extent of dysentery in Waterford, corroborates the remark already made, namely, that the inhabitants suffered in a much greater proportion than the military, and with the former that the disease was much more severe. Dr. Poole is of opinion that dysentery was contagious. The disease began to make its appearance in the city of Waterford in the month of July, 1818; it prevailed to an alarming extent in September, and continued till the winter, when the cold weather was thought to have put an end to its ravages.

At Cork also this disease was less frequent among the troops than among the commonalty, but that some increase took place even among the regiments in garrison during the late epidemic, and more especially in the latter end of the year 1818, will appear from the following return :

* 1st volume of "the Account of the Fever lately epidemical in Ireland, by Drs. Barker and Cheyne."

PATIENTS ADMITTED WITH DYSENTERY INTO THE GENERAL HOSPITAL, CORK.

From February to May 1817	-	4
May to August	-	0
August to November	-	2
November to Feb. 1818	-	10
		<hr/>
Total	-	16
		<hr/>
February to May	-	2
May to August	-	3
August to November	-	13
November to Feb. 1819	-	9
		<hr/>
Total	-	27
		<hr/>
February to May	-	0
May to August	-	0
August to November	-	1
November to Feb. 1820	-	0
		<hr/>
Total	-	1
		<hr/>

Of these one patient died in 1817, one in the quarter ending November 1818, and one in the quarter ending February 1819. Dr. Pitcairn, the Deputy Inspector of Military Hospitals at Cork, who furnished the foregoing return, affirms that the cases were more numerous in the regimental hospitals, in which he conjectures that the mortality was about one in twenty, than in the general hospital. To Dr. Pitcairn I am also indebted for valuable information on the subject, which he obtained from

two Physicians of eminence in Cork, namely, Dr. Hallaran and Dr. M. Barry.

From the first we learn that dysentery has not ceased to be prevalent in Cork, at particular seasons, during the last thirty years, but that it has prevailed most especially in years of scarcity, and when the common articles of food have proved of bad quality ; it has prevailed with most severity in the autumnal season, and during the continuance of wet weather. Dysentery frequently occurs as an endemic in Cork, accompanied with a fever peculiar to itself, which invariably has subsided on relief being afforded to the dysenteric symptoms. Ague but seldom occurs in the city, though it is very common in situations distant not more than one, two, or three miles from it. Dysentery at certain seasons is to be met with in all parts of Cork, but most remarkably in the low parts of the city, and near the slaughter houses, and where there are deposits of filth, with want of due ventilation. It has been obviously contagious on many occasions. The mortality in general is most remarkable among the aged and infirm. The dysentery, which prevailed in Cork in the years 1818 and 1819, seemed intimately connected with the causes which contributed to the epidemic fever of those years, was found to be simultaneous with that fever, and frequently succeeded to it.

The dysentery, according to Dr. M. Barry, has always from time to time been prevalent in Cork, but it is chiefly confined to the poorer inhabitants ; those

in good circumstances are generally exempt from it, though the disease now and then attacks an individual amongst the latter. In the early part of his residence in Cork, Dr. Barry had frequent occasion to observe dysentery amongst the inhabitants of a low confined district of the dispensary, which was then, as at present, extremely filthy and ill ventilated. Continued fever often existed at the same time, and in the same quarter of the town, as dysentery; but he has often seen dysentery prevail without continued fever, and vice versa.

The dysentery of Cork, which differs in many respects from that of authors, and also from the specimens which he has seen of the disease in England and Scotland, depends entirely on local circumstances. He does not consider the dysentery of Cork contagious. He has had occasion to treat single patients, from whom he never saw it spread: in the practice of the dispensary different persons in a family have been ill at the same time, but they were exposed to the same remote cause. He mentions a fact, which he considers decisive of the non-contagion of dysentery: in the years 1797, 1798, and 1799, the dysentery prevailed in the Caithness legion of fencibles to some extent. The Surgeon, anxious to determine the question as to its infectious nature, caused the same glyster pipe to be used, without cleansing, for those labouring under dysentery, and those who were free from that disease; the latter notwithstanding were not infected, from which he concluded that the dysentery of Cork is not infectious.

Dr. M. Barry affirms that the troops were frequently liable to dysentery, while they occupied the old barracks ; but he has heard that it has been of rare occurrence in the new barracks. Several years ago, when the disease raged violently in the old barracks, (now the depôt for convicts) the care of the sick was, in the absence of the Regimental Surgeon, entrusted to the late Mr. Bell, Surgeon, in Cork. At the period in question the troops were supplied with water from the river Lee, which, in passing through the city, is rendered unfit for drinking by the influx of the contents of the sewers from the houses, and likewise is brackish from the tide, which ascends into their channels. Mr. Bell, suspecting that the water might have caused the dysentery, upon assuming the care of the sick, had a number of water carts engaged to bring water for the troops from a spring called the Lady's well, at the same time that they were no longer permitted to drink the water from the river. From this simple, but judicious arrangement, the dysentery very shortly disappeared among the troops.

The poor inhabitants of Cork had no other water than that from the river Lee, until very lately that a few public fountains were established for their use, and it is certain that dysentery is not now nearly so common as formerly. At the time referred to Dr. M. Barry never witnessed so fatal a disease as the dysentery of Cork. He believes that at least one out of three persons affected with it, perished. He

is not prepared to say what is the rate of mortality at present.

From these communications from Cork I should be disposed to conclude that the inhabitants of that city are liable to dysentery in each of its principal varieties, both as connected with continued fever, and as an endemic disease connected with intermittent fever ; the former variety contagious, the latter not at all so.†

Intermittent fever, a disease which is rare in Dublin, was seldom witnessed during the time that dysentery prevailed with us, namely, from September 1818 to February 1819 : I did not observe more than two or three cases of intermittent fever in hospital during that period. I am informed by Mr. Lloyd, Surgeon to the Dispensary at Malahide, that scarcely a case of intermittent occurred in a very aguish tract, which lies between Balldoyle and Swords, between five and seven miles from Dublin, while continued fever was epidemical in that district ; and I understand a similar remark has been made in other parts of the country, where ague is often endemical ; it almost disappeared in Kilkenny during the same time,* and was much less prevalent than usual in Cork and Limerick. It is pretty clear, therefore, that the cause of the dysentery of 1818 differs from that which also produces intermittent fever ; the disease of 1818 rather belonged to that great

† The reader is here referred to Dr. Harty's valuable work on Dysentery.

* Mr. Pack.

variety of dysentery, which originates in causes that are also productive of continued fever.

In the beginning of September 1818, when I understood that there were many cases of dysentery in the Hardwicke Fever Hospital and the Richmond General Penitentiary, I made a report to that effect to the late Governors of the House of Industry, and at the same time I suggested the expediency of removing all patients who laboured under dysentery from the fever wards to wards better suited to their accommodation, observing that although equal attention to cleanliness and ventilation was required in dysentery and in fever, yet that the fever wards were too cold for patients affected with bowel complaints ; that the fever patients were disturbed, and the atmosphere of the fever wards was vitiated by the frequency of the calls to go to stool, and the effluvia of the evacuations which are peculiar to dysentery ; that according to many professional men dysentery is an infectious disease, and might be communicated to the convalescents and servants of the Fever Hospital, and thus add to the difficulties of providing for the admission of the destitute sick, which were already great ; and finally, that the patients in dysentery had become so numerous as to prevent the advantageous working of the Fever Hospital.

In consequence of this representation, orders were given by the Governors of the House of Industry, whom I always found most attentive to every sug-

gestion which promised to improve the condition of the sick, to prepare wards in the Whitworth Hospital for the reception of patients labouring under dysentery, who had contracted that disease during fever or during convalescence from fever, or who were afflicted with dysentery when they were admitted into the fever hospital; and at my request these wards were given to me as a part of my hospital charge.

Little benefit can be expected from mere prescription unless an Hospital be suited to the diseases which it contains, unless proper regard be paid to comfort in the supply of the patient's food, to the cleanliness of his person, to the spaciousness of the ward, to the purity of the air which he breathes, and to his feelings; when these things are neglected the consequence is not merely that recovery is retarded, but that new complications of disease arise. In the present instance the sashes of the windows were closed, while at the same time the ventilation of the wards was secured by additional apertures which were made into the chimneys near the ceiling: a cotton bed-gown and a pair of thick worsted stockings were obtained for every individual; instructions were given relative to the effectual swathing of the patient with compresses and flannel rollers; slipper-baths and bed-pans for the wards were provided; the nurses were enjoined to pay scrupulous attention to cleanliness, and the dietary of the Hospital was changed, the following being substituted for the usual diet table of the establishment:

*Dietary of Patients labouring under Dysentery
in the Whitworth Chronic Hospital, during the
Year 1818-19.*

Diet.	BREAKFAST.	DINNER.	SUPPER.
Full.	White bread $\frac{1}{2}$ lb. New Milk 1 pint. or, Rice, 4 oz. New Milk, 1 pint. Cinnamon & Sugar.	Mutton, $\frac{1}{2}$ lb. raw, made into soup. White bread $\frac{1}{2}$ lb.	White bread, 4 oz. New Milk, 1 pint. or, Flour, $\frac{1}{4}$ pint, New Milk, 1 pint Cinnamon, &c.
Middle.	As above.	White Bread, $\frac{1}{2}$ lb. New Milk, 1 pint. Spice and Sugar,	Flour, $\frac{1}{2}$ pint. New Milk, 1 pint. Spice, Sugar, &c.
Low.	Flour, $\frac{1}{2}$ pint. New Milk, 1 pint. Spice and Sugar.	Rice, 2 oz. New Milk, 1 pint. Spice & Sugar.	Flummery, 1 pint. New Milk, 1 pint.

Sago, Indian Arrow Root, Tapioca, Eggs, Tea, Chickens, &c.
were occasionally given.

Rice Water, Barley Water, New Milk, *ad libitum*.

J. TAYLOR.

I felt unwilling to allow so favourable an opportunity of informing myself on the nature and treatment of dysentery to escape. Generally speaking, endemic or epidemic dysentery is witnessed only by the army or navy medical officer at times of general agitation and anxiety, among troops exposed in camp, cantonment, or on shipboard, to the exhalations of an unwholesome soil, or in garrisons besieged, or ar-

mies harassed by fatigue, depressed in spirits, or stinted in food, retreating before a victorious enemy. I believe it has rarely fallen to the lot of a physician in civil life, possessing all the advantages of books, and of consultation with skillful and experienced colleagues, to witness dysentery upon such a scale as I did in the autumn and winter of 1818.

The tendency to dysentery was manifest from the beginning of autumn 1818 to the beginning of spring 1819. Dysentery was at its height in the month of October, and became less frequent in January. In early autumn several cases of cholera degenerated into dysentery, and in the spring following symptoms of dysentery accompanied the measles, then epidemical in many parts of Ireland. The occurrence of dysentery in the present instance is an additional proof of the truth of the observation which has been often made, namely, that in the latter end of very hot seasons the bloody flux is apt to become general.

The patients admitted into the Whitworth Hospital were frequently of worn-out constitutions, and it appeared to us, that when any other organic disease coexisted it was much more difficult to subdue the symptoms of dysentery.

Very often dysentery arose during convalescence from fever, in which case I several times ascertained that the preceding fever was not attended with any unusual gastric or enteric irritation. Sometimes the disease commenced at the termination of fever, and

then it was at first so slight as to appear like a salutary crisis, its only symptoms being mucous stools with a degree of uneasiness at the termination of the rectum. Frequently the disease arose in the course of fever. Nausea, mucous or bilious vomiting, tenderness of the epigastrium and deep yellow suffusion of the skin characterized many fevers which occurred in the autumn of 1818; and when symptoms of dysentery took place before those of fever ceased, first, there were borborygmi and tormina, then mucous and bloody stools and tenesmus, the character of fever being gradually lost as that of inflammation of the mucous membrane of the great intestines was established; but from the peculiar nature of the fever of the season it was sometimes difficult to mark the precise time when the new disease commenced. The bilious fever of the autumn continued till near the termination of winter, consequently it existed as long as the dysentery was prevalent in the Hospitals of the House of Industry. When the symptoms of bilious or gastric fever were exchanged for those of dysentery, probably an extension took place of the irritation from the mucous membrane of the stomach and small intestines to that of the large intestines; hence borborygmi and tormina, as they occur in affections of both portions of the intestines, were not sufficient to mark the change in the disease till they were attended by mucous bloody stools, then indeed the case no longer admitted of doubt. The case of Tully, p. 31, well illustrates this view of the disease.

When dysentery was unconnected with continued fever, which apparently often was the case, there was nothing peculiar in its origin; the patients generally assigned cold, damp, fatigue, hardships, indigestible food, as the causes of their disease, which began with confinement of the bowels, chills, pyrexia, tormina, unsatisfactory stools, and tenesmus.

I have analysed 98 cases of dysentery, which were carefully noted, and I find that 33 of these arose during recovery from fever, 15 while the fever was in progress, 15 arose from cold, or cold and wet, 4 from indigestion; the rest were doubtful, but it is observable, that of these many had been exposed to febrile contagion, and that nine of the number had been in close communication with patients labouring under dysentery, four having been nurses or deputy nurses in wards in which that disease had occurred, four had slept with patients in dysentery, of whom one had used the same night chair; the ninth was one of our clinical clerks, Dr. Prevost of Geneva, who conceived that he had contracted the disease in the dissecting room, where, in the ardour of his zeal for medical science, he spent much of his time hanging over the bodies of those who had been victims of dysentery in the Whitworth Hospital.

During the prevalence of dysentery, fevers extending to the end of the second and third week were much less common than fevers of five, seven,

and nine days, on recovery from which last the patient suffered one, two, or more relapses, in so much that patients labouring under a fourth attack of fever were often to be seen in our hospitals. It was observable that dysentery frequently occurred at that period of recovery from fever when there seemed the greatest liability amongst the convalescents to relapse. Dysentery, whether its connection with fever could be traced or not, often commenced with a rigor, and terminated in free perspiration ; it was sometimes converted into a fever, while on the other hand, fever was frequently converted into dysentery ; and lastly, during convalescence from dysentery, several persons sustained an attack of fever ; in short, these forms of disease were convertible the one into the other ; so that the opinion of Sydenham, that dysentery is a *febris intro-versa*, that it is fever turned in upon the intestines, received support from our observations ; and it is not unreasonable to suppose, that as these patients in my wards, in common with most of the poor of the city, had been exposed to the contagion of fever, this contagion, according to the condition of the system at the time of its application, or some other modifying circumstance, may have produced at one time fever, at another dysentery. The nurses, who escaped dysentery, were for the most part seasoned to fever, and at least two of those who suffered under the former disease had not been affected with fever during the epidemic.

In almost every patient, of whose case we obtained a distinct account, whether the disease arose

from fever, or was unconnected with it, a remarkably foul taste was complained of, such as often exists when there is a deficiency of bile in the intestines; considerable flatulence also existed, then rigor took place, which was the commencement of pyrexia: there was a case or two, in which the rigor took place after symptoms of dysentery were established. In a few cases nausea occurred as one of the earliest symptoms; in a few, tenderness of the belly; in several, a severe lancinating pain in some of the abdominal regions, generally in the umbilical, or even lower; but in the common course of things the rigor was followed by gripings, a frequent inclination to go to stool, with a desire to continue the effort, by which the bowels are emptied, and to these symptoms there was soon added a feeling as if the effort had been unproductive or incomplete,—as if there was still something remaining in the bowels; the skin was dry and hot, sometimes pungently so, the stools from the first were loose, perhaps not immediately undergoing any other change in their appearance, but in general they were mucous, and in rather more than one half of the cases there was a discharge of blood on the very first day of the disease.

With respect to the discharges from the bowels, the only remark I have to make worthy of attention is that, notwithstanding very diligent inquiry, we could not discover that scybala were passed by any one of the patients. As regard to cleanliness prevented the stools being preserved for daily inspection, but they were frequently inspected, and

their appearance was regularly reported by the patients themselves, and by the nurses, some of whom were observant and faithful. All the other varieties of excrementitious matter, which belong to dysentery, were repeatedly witnessed : feculent matter of a natural colour, of a drab colour, or of the colour and consistence of flummery ; feculent matter, mixed with mucus, with clear blood ; blood without any addition ; mucus alone, mucus tinged with blood, mixed with blood, with purulent matter ; purulent matter alone, or mixed ; a bright green discharge, like conferva, a deep green discharge, produced by calomel and opium ; we also observed a loose, but not otherwise morbid discharge, alternating with bloody, mucous, or purulent stools, when the disease was very near a fatal close, and in some few instances we detected what seemed either shreds of membrane which had sloughed, or portions of coagulable lymph, but no scybala were found. It seems probable, had there been scybala, that they would have been detected in the bowels during dissection, which was not the case in a single instance. Mr. Pack, of Kilkenny, in an answer to some inquiries on the subject of dysentery, which were proposed to him at my request, observes that dysentery, as it appears in that city, is dissimilar from the disease he has witnessed in the Mediterranean and in camps ; in no instance having been able to detect scybala either in the discharges, although the attention of the nurses was particularly directed to this point, or by dissection ; he has generally found the stools to consist of pure blood, or blood and mu-

cus mixed, and after death he has at times found the colon contracted, at others distended, and generally ulcerated, but nothing like *fæces* or *scybala* contained in it.

In many respects the dysentery of 1818 resembled that which has been described as occurring in tropical climates.* As in the latter variety, so in the former, the functions of the liver and skin were disordered from the commencement of the distemper, and continued thus until its termination. The skin was remarkably unyielding, and, if we may judge by the appearance of the stools, the biliary secretion was often suspended for many days.

In point of severity the cases differed from each other as much as can be conceived; sometimes the complaint appeared in the form of mucous diarrhœa, without much pain or fever; sometimes it was attended with all the symptoms of an acute enteric inflammation. We remarked that the most severe cases in the first stage, and the most unmanageable throughout, arose in the course of fever: the mildest cases were those which seemed to have least connection with that disease.

The symptoms, on which chiefly we formed our prognostic in the early part of the disease, were the tenderness of the abdomen, the degree of pain, the frequency of the stools, the extent of pyrexia, and

* Johnson, p. 354.

more especially the quickness of the pulse: the pulse was often hard, full, or strong; but these qualities were of less importance than its quickness. It was difficult to ascertain whether ulceration of the mucous membrane of the intestine had taken place or not, and still more whether the ulcerations were large, numerous and deep: from the appearance of the stools, in the advanced stages of the disease, these things might sometimes be known, but not so in the early stage. When the disease continued without relief for twelve or fourteen days, a degree of emaciation usually became observable, much more rapid in some than in others, and which was always an alarming symptom; when, added to emaciation, a patient in the second or third week of dysentery acquired a haggard look, when he had a quick pulse, and an abdomen impatient of pressure, we had little hope of his recovery.

A harsh, dry, opaque, dirty looking skin, a florid, clean, varnished tongue, vigilance, a hollow eye, and pallid, wasted, faded cheek, a desire to go to stool immediately after drinking, pains in the knees, and cramps in the legs, fits of dyspnœa, a tendency to œdema and ascites, belong to a more advanced stage, but not to the last, which was characterised by extreme emaciation, supine posture, involuntary stools, a thin reddish secretion flowing without check, sordes on the teeth, hiccup, tendency to delirium, difficulty of swallowing, and a pulse like a thread.

At one period, when this disorder was most fatal,

our expectations of recovery were confined to those cases which had not existed long, and in which the patient was not emaciated at the time referred to. A majority of the patients died, who had been ill more than six or seven days, and of those who were emaciated, scarcely one recovered. In some cases the disease hurried on to a fatal termination, with a speed which nothing could retard ; but such cases fortunately were rare. Sometimes a case, at first marked with no symptom of unusual danger, suddenly changed its character to that of uncontrollable severity. Thus, a man of the name of Maher, who had been affected with dysentery for five or six days, in a severe, but not alarming form, sustained on the 24th of August a very remarkable aggravation of distress ; he had frequent paroxysms of excruciating pain, with continued desire to discharge his bowels, and the greatest tenderness of the belly, symptoms which resisted blood-letting, large opiates, and every expedient of art, and terminated in death on the 25th, after he had been in agony which can scarcely be described : on the day on which he died his whole body was bathed in sweat, and every muscle was convulsed from pain. Although this is not the place to dwell on the morbid appearances, I may be permitted to observe, that the dissection afforded an explanation of the agonies which this patient endured, for the largest portion of the great intestine, not deprived of its mucous coat, was not more than an inch square ; in many parts the remaining surface was black, rough, and eroded ; in numerous others the muscular coat was as clean as if

it had been prepared for anatomical demonstration. In the preceding case the work of destruction was unusually rapid: scarcely one-fourth of the fatal cases terminated within the first fortnight; a fourth more of the patients died within the month, the rest lingered for two or three months.

Dysentery was productive of several forms of dropsy,—ascites, and anasarca in particular; and it is worthy of remark, that a swelling occurred in several of the patients, both males and females, resembling the phlegmasia dolens in all respects but in its connection with parturition. In one or two cases symptoms of hydrothorax were observed.

Respiration sometimes became suddenly oppressed in the advanced stages of dysentery, and was attended with some pain in the chest, and a short teasing cough with scanty mucous expectoration; the patient could not remain one minute at rest, from universal uneasiness; the pulse was small, the countenance altered, generally livid, or with a circumscribed flush; when asleep, the patient fell into colliquative sweats; these symptoms were generally followed by sudden prostration, cold extremities, and, at no great distance of time, by death. This affection seemed to depend upon a translation of disease to the lungs, a degree of effusion having been demonstrated in the cavity of the pleura, with accumulation of blood in the substance of the lungs, in every dissection which was made; in one of these we found a very considerable exudation of puriform mucus in the cavity of the

bronchia. In one or two instances, in which the patient was affected in this manner, before his strength was exhausted, venesection, and a blister to the sternum, removed the attack of dyspnœa.

Death sometimes occurred unexpectedly, from the escape of the contents of the intestines into the cavity of the peritoneum, in consequence of a portion of that coat being destroyed by ulceration.

The continued irritation, and straining at stool, led to very unpleasant consequences, frequently to dysuria and procidentia ani, and when there was a tendency to hæmorrhoids, the sufferings of the patient were much aggravated by the tumours enlarging, protruding, and becoming painful. In one instance dysentery led to consequences even more deplorable, as will appear from a perusal of the case of Elizabeth Curran. After exposure to cold, in the month of September, this patient was attacked with rigors; she was affected with creeping of the skin, which was followed by pain in the belly, tormina, bloody stools, and tenesmus; in three weeks the discharge of blood stopt, but the other symptoms continued till the 22d of November, the period of her admission into the Whitworth Hospital, at which time she laboured under severe twisting pain in the belly, followed by frequent inclination to go to stool: the stools were small, mucous, and followed by tenesmus; there was a swelling of the abdomen, particularly in the umbilical region, soft, but impatient of pressure; her pulse was quick, her tongue furred;

the pain was always brought on by eating or drinking : these symptoms, which were aggravated by the rumbling of her bowels, by occasional eructations, and by dysentery, baffled every means employed. On the 7th December, her complaint having resisted repeated bleedings, a variety of purgatives, baths, calomel, and opium, the outline of the abdomen resembling that of a woman in advanced pregnancy, and no discharge having been for some days obtained from the bowels but a little mucus, an aloetic glyster was ordered, which could not be administered, owing to some resistance encountered by the tube of the syringe in the rectum ; this led to an examination of the rectum, and the discovery of a stricture about four inches from the anus ; a flexible catheter was introduced, and carried beyond the obstruction ; and in this way an injection was administered without relief. On the 10th many quarts of tepid water were thrown up, and returned, mixed with a considerable quantity of excrementitious matter, and with some subsidence of the swelling ; bougies, and every means were tried to relieve her, but nothing but opium seemed to lessen her sufferings, till her illness terminated in death on the 13th of the month. On dissection, the intestines were found greatly distended, the small intestines being seven, and the great intestines nine inches in circumference ; at four inches from the anus there was an extensive hard stricture, through which the finger could not be passed ; the coats of the intestines were nearly an inch in thickness, which was chiefly owing to a dense, white, fibrous matter, interposed

between the peritoneal and muscular coat; the mucous membrane, both at and above the stricture, was in a state of ulceration.

The dissections, which were made in the Whitworth hospital in the autumn of 1818, and the ensuing winter, of the bodies of such patients as died of dysentery, presented the diseased appearances chiefly in their commencement, or after the morbid action had run its course. Death scarcely took place while the disease was in its intermediate stages. If dissections of all the intermediate stages of the disease had been made, we might have been able to point out with more precision the symptoms which belong to the commencement of the ulcerative process, by which means our prognostics would have been more accurate. The ascertaining of this point, which certainly is one of great importance, must be accomplished by the labour of our successors in pathological science.

The mucous membrane of the stomach, and small intestines, sometimes presented an inflamed appearance, which in general became more remarkable as we approached to the great intestines; then ulceration began to show itself, at first superficial, afterwards laying bare the muscular fibres of the intestines; the ulcerations became larger, more numerous, and deep as the rectum was approached; but it was remarked that the last three or four inches of the rectum were sometimes pretty sound. The pe-

ritoneum was found less diseased than might have been expected.

The deaths which took place when dysentery was in its first stage, were owing to fever, or to some other fatal disease which concurred. When owing to fever, a peculiar state of the mucous membrane of the stomach and intestines was noted. This membrane was found of a more or less deep red or purple colour ; it was rather thickened, soft and pulpy ; the least violence destroyed the continuity of the surface, which had lost its healthy smoothness, was uneven, and not unfrequently rough and granulated, the blood vessels being enlarged and loaded with blood : where the alteration in texture was inconsiderable, there were numerous spots of a deep red colour, which at first resembled extravasations, but, on close examination, seemed to be blood vessels, ramifying in an arborescent form, and connected with veins. The stomach contained a viscid mucus, firmly adhering to its coats, and mixed with an opaque yellow, or whitish matter ; the contents of the large intestines were fluid, and of a yellowish green colour.

In a patient whose death was caused by disease of the lungs, which were found in a state of extreme sanguineous congestion, the bronchiæ being also stuffed with glairy mucus, the mucous membrane of the great intestines was extremely thick and vascular, of a florid red colour, pulpy and shining ; the remaining coats were thickened and rather rigid, and the vessels of the peritoneum, large and turgid, so

that, from looking at the outside through the intestine, we expected to find the internal surface in a diseased state. The person alluded to was named Mahon, and was admitted into the Fever Hospital on the 6th of September, 1818. The symptoms on her admission were pyrexia, tenderness of the epigastrium, headach and general pains : the headach was relieved by local bleeding, but the tenderness of the epigastrium and general pains continued, and were accompanied with oppression of the breathing, cough and copious expectoration : the symptoms of pulmonic disease increasing, reduced the patient to such a state of extreme exhaustion that she sunk on the 12th day after her admission. Four days before her death, dysentery was superadded to her already complicated sufferings ; she had a lancinating pain in the abdomen, tormina and discharge of blood by stool ; symptoms, which were relieved by castor oil, followed by compound powder of ipecacuanha. The most interesting part of the dissection was the display of a highly vascular state of the whole of the mucous membrane of the intestines, without ulceration or erosion ; proving, that a free discharge of blood may from this, as from other mucous surfaces, take place without previous ulceration or erosion.

Another case deserving of record occurred, in which death took place before the inflammation could be said to have attained the length of ulceration, in which, however, there could be discovered a slight erosion of the epidermoid coat of the mucous mem-

brane. One of the deputy nurses of the Richmond General Penitentiary, Mary Tully, was seized on the 17th of September with rigor, nausea and bilious vomiting, which continued all night. On the 18th, there came on headach, a stitch in the left side, oppressing the breathing; tenderness of the abdomen, white fur on the tongue, foul taste, great frequency and strength of pulse and heat of skin. On the 19th, intolerable headach, anxiety, increasing frequency of the pulse, and pain in the region of the stomach, with tenderness of the epigastrium, frequent vomiting of mucus, with much straining. On the 20th, continued vomiting, smallness with frequency of the pulse, brown tongue, insufferably bad taste, the belly all the while free. On the 21st acute pain in the bowels, nine or ten stools, consisting of green glairy matter and pure blood; the abdomen now intolerant of the slightest pressure; countenance sunk and pallid; pulse feeble; strength prostrate. In the evening, return of vomiting. On the 22d, the pulse was scarcely perceptible; the feet cold; the countenance shrunk and ghastly; her principal complaint however being a severe burning sensation in the region of the stomach, which was intolerant of even the slightest pressure. In the evening she vomited a dark fluid, with a precipitate like coffee grounds; the stools were pitchy and extremely foetid, the teeth covered with sordes. On the evening of the 22d, being the 3d day of the bowel complaint she died, after a return of tormina with redoubled violence: she referred her agony to the umbilical region. Every thing

which promised to relieve this patient was done by my friend Dr. Crawford, but the disease pursued its course.

On dissection, the mucous coat of the stomach and intestines was in very many places elevated by air, which was interposed between it and the subjacent coat, and there were numerous spots of a bright red colour, loaded with blood ; the membrane lying between these spots, even after a minute injection, did not appear to contain a single vessel, while the red patches above mentioned were injected to an extreme of minuteness, and had given way to the injection which was extravasated. These patches in many places confined air bubbles, but the latter in many others existed where there were no patches. The ileum was free from either patches or air in its coats. The internal surface of the rectum and sigmoid flexure of the colon was highly vascular ; here there were some black rough stripes, and a few small erosions.

As dissections elucidating the early stages of dysentery are rare, I shall delay the reader a little longer, while I relate another case, which was attended with appearances in some respects similar, but with the addition of an effusion of coagulable lymph on the mucous membrane of the small intestines, which extended over nearly the whole of the jejunum ; an appearance very uncommon. The lymph was of a bright yellow colour : it adhered to the surface of the mucous membrane, but could easily

be detached in a flaky form, exposing the surface beneath in a highly vascular state. The free surface of the coagulated lymph was granulated and uneven, remarkably so where it covered the valvulæ conniventes. The large intestines were more vascular than natural, with numerous minute circular depressions, extremely vascular, over the whole of their mucous membrane. The mucous membrane of the folds of the colon were of a grey colour, and rough, superficial erosions of an irregular shape intervening between them. The patient, Eliza Morris, æt. 34, was admitted into the Hardwicke Hospital on the 21st of August, after an illness of eight days duration, which commenced with a rigor, headach, pain in the bowels and looseness; the symptoms on admission were a quick weak pulse, furred tongue, anxiety, general pains, headach, tormina and frequent stools. On the 22d, added to these, were tenderness of the epigastrium, a tongue with a thick fur, and a very bitter taste. On the 23d and 24th, incessant vomiting, tormina, tenesmus, frequent bloody stools; great tenderness of the abdomen, thirst, and prostration of strength. On the 25th repeated efforts at stool, with scarcely any evacuation; much tenesmus; black tongue; on the 26th death, after excruciating pain.

It is to be observed, that in the preparations which the dissections just alluded to supplièd, there is no perceptible thickness of the coats of the intestines; the thickening of the intestines belonged to the

more protracted cases of the disease, and generally bore a proportion to its continuance.

We may divide the preparations in the Whitworth Hospital, made at my request, into two classes, those in which the coats of the intestines are not thickened, and those in which they are. Of the first class, there are specimens of the following appearances: The mucous membrane increased in vascularity, without abrasion or ulceration. (Mahon). The mucous membrane covered with coagulable lymph (Morris). The mucous membrane simply abraded, its epidermoid coat removed (Tully). The mucous membrane ulcerated; the portions of membrane intervening being of a natural appearance (Flood, Parker, Nolan). Lastly, the mucous membrane partly ulcerated, partly covered with coagulable lymph (Martin Dunne).

In the second class are the following genera: The mucous membrane simply abraded. (Flood, Kelly, Mary Ryan.) The mucous membrane ulcerated; the portions between the ulcers being of a natural appearance (Cox, Taafe.) The mucous membrane rugous and ulcerated (Hagan, Reilly.) The mucous membrane ulcerated and filamentous, hanging in shreds as if sphacelated (Dunne, Melia, Baillie.) The mucous membrane partly ulcerated, partly removed, exposing the muscular coat. (Campbell, Connery, Cullen, Moran, Conolly.) In many of these preparations, the mucous membrane, when

not eroded or ulcerated, is covered with an exudation of coagulable lymph.

In a good many dissections there were numerous holes large enough to admit the head of a pin, more especially in the rectum and lower part of the colon, regularly round, and for the most part vascular in the centre, with elevated edges; these apertures were at first supposed to be small ulcers, but dissections, made after dysentery had attained an advanced stage, left little room for doubting that they were the ducts of the mucous glands enlarged, and, in the advanced stages, either ulcerated or connected with a cyst formed of the lining membrane of the duct, which secreted a gelatinous matter, whereof these cavities were often full.

I have dwelt perhaps longer than necessary on the morbid appearances, which I have been induced to do from my opportunities of obtaining accurate information on this head having been peculiarly favourable; and now having described the morbid appearances without referring to any author on the subject, I find that it was my duty to be particular, as it appears that some of the sources of information are not of the purest kind on which physicians have relied. Thus, for instance, it was customary to refer to Sir John Pringle's account of the dysentery, trusting to the general accuracy of that eminent physician; whereas we learn from Dr. J. Hunter, that Sir John acquainted him, that he put but little confidence in any of the dissections of dysenteric

patients which were made in the military hospitals, as the bowels were not inspected minutely.

The liver was, in a majority of the dissections, apparently sound, but in a good many instances remarkably otherwise ; in two cases there were abscesses formed in its substance, and in a considerable number of bodies it was in a state of great sanguineous congestion.

In the wards which were under my care in 1818, the insufficiency of dogmatic instruction, unsupported by clinical experience, was evinced. I had often witnessed obstinate cases of dysentery, but I had not formed an adequate conception of the horrors of that disease, until I saw the patients who were congregated in the wards of the Whitworth Hospital : every successive visit more strikingly exemplified, in the hopelessness of the second stage of dysentery, the infinite consequence of treating its first stage with skill. The lower orders in this country, it is true, generally exhibit a very patient endurance of suffering, when they feel death approaching, yet to their physician, from whom they still hope for relief, their situation is only the more affecting, from the extraordinary calmness with which they prepare themselves for death, when it seems inevitable. One little trait of magnanimity the reader will perhaps allow me to mention. I have observed a patient, himself in a hopeless state, eloquent in detailing the sufferings of a comrade in an adjoining bed, while he has left the description of his own

distress, his watching and pain, and all the particulars of his complicated suffering, to the nurse or her assistant.

I undertook the charge of the patients labouring under dysentery with hopes, which I am sorry to say, I soon found were not to be realized. Under such circumstances the situation of the physician is indeed trying. From frequent disappointment in the use of the means which have received the sanction of authority, he is in danger of falling into a heartless routine, unless he is induced to rouse himself from apathy, by a recollection that it is his duty, at least to point out the causes of his failure, which he cannot do until he has ascertained their nature, and put every expedient which has been recommended by his predecessors to the proof.

It is worthy of observation, that while the dysentery was so frequent a disease in the hospitals of the House of Industry, it was comparatively rare in the other fever hospitals of Dublin; to account for which it may be mentioned, that patients actually labouring under dysentery were either excluded, or considered themselves excluded from the latter, while they were promptly received into the former. In the Fever Hospital in Cork-street, however, attacks of dysentery were by no means so numerous as at the House of Industry, and hence it is of importance to inquire in what these fever establishments differed. The patients at the House of Industry in 1818 had not hospital dresses as at Cork-street. The Rich-

mond General Penitentiary, in which a great majority of the fever patients were, not being intended for a Fever Hospital, was not so completely ventilated as it would otherwise have been ; but perhaps the greater prevalence of dysentery may have arisen from the number of sick in the House of Industry, which exceeded the sick in all the other Fever Hospitals. It cannot be denied, that the fever wards were, to appearance, equal to those of the permanent Fever Institutions of this city, which, in point of comfort and cleanliness, are worthy of imitation ; and that the patients were not crowded in any of the wards.

With regard to the Whitworth Hospital, its site is good, that of the House of Industry, within the bounds of which it stands, being one of the best in Dublin. It commands an extensive view of the city, and of the county of Dublin mountains ; it is well supplied with water ; its wards are remarkably clean and well ventilated ; for each bed ample space is allowed ; the sick are regularly supplied with wholesome food, and they have every comfort which an Hospital can afford ; and yet it must be admitted, that of the patients who died, some, probably, would have recovered in a private house, away from the moans of the dying and the atmosphere of disease ; to which last I attribute much of the disappointment which I experienced. Patients labouring under hectic fever, and such is the nature of the fever which accompanies the advanced stages of dysentery, appear to me to waste away faster in an

Hospital than in any other situation. Several of the patients, with most unfavourable symptoms, who at my request left the Whitworth Hospital, soon recovered in their own lodgings; but unfortunately there were not many who had lodgings to go to; the great majority were destitute beings, who, had they been dismissed from the Hospital, would probably have died in the streets of the city. I was therefore constrained to allow them to remain in the Whitworth Hospital, which, in every respect, was preferable to the Fever Wards whence they came. Had they been discharged from our Hospitals they would have propagated the disease in the crowded and miserable lodgings to which alone they could have had access. But in as far as a consideration of the case was limited to the recovery of the patients, could they only have been supplied with means of subsistence, and protected from the weather, I think their chance of recovery would have been greater in any situation than in an Hospital so occupied. It appeared to me that the progress of the disease was less rapid in two small wards, originally destined for patients who had seen better days, which were now occupied by patients in dysentery, than in the large wards, which contained ten or twelve patients each.

I have such confidence in change of air and scene in the course of acute as well as chronic diseases, that I trust it will not be presumptuous in me to express a hope, that in future no Fever Hospital will be erected without having a convalescent ward, remote from the fever wards, and as unlike them

as possible. I have often seen benefit from a change of air and scene, made in the early stage of dubious convalescence from febrile disease; nay, sometimes even in the course of these diseases, inso-much that the question of such a change, even before acute diseases come to a close, is, I am persuaded, deserving of more consideration than has yet been bestowed upon it.

I have now shortly to explain the methods of treatment which were adopted, and which were very various, according to the stage and severity of the disease. It is a great error to suppose that a disease admits of only one method of treatment. I by no means affirm that the mode of treatment which I followed is the only method of successfully treating dysentery, but merely that it seemed better suited to the form of the disease which fell under my observation, than other methods which are more generally adopted, and this opinion is formed after a fair comparative trial. In the course of the season the practice of the Hospital underwent several changes, particularly in the advanced periods of the disease, and our confidence in certain methods of cure fluctuated, was weakened by experience, and then restored by experience still more extensive. For example, the treatment by means of mercury did not succeed so generally as I expected. Calomel and ipecacuan; the blue pill and ipecacuan; doses of five grains of calomel and half a grain of opium, at stated intervals of four or six hours; larger doses of the same medicines, a scruple of calomel and

two grains of opium—all these methods often failed when the disease was established, not only with me, but with some of my colleagues who treated the disease in the fever wards; and yet I have no doubt that the mercurial treatment is entitled to confidence, although probably not to the same degree of confidence that it is in other climates.

The doctrine pretty generally taught with respect to the nature and treatment of dysentery did not apply to the form of that disease, which is under consideration. We are told that, before dysentery has long continued, the fæces are formed into compacted masses, and that the patient complains of a load in his intestines, with which they feel oppressed. The only complaint of this kind, which I heard, was of a sensation as if the lower part of the intestines had not fully discharged its contents producing tenesmus. We are directed to give purgatives, until the load felt by the patient shall have been removed, and we are told that purgatives have not performed their office until, by removing scybala, the cause of this sensation is removed, a rule which it is plain cannot apply to a disease, in which there are no scybala. Indeed that theory of the disease, which supposes the symptoms of dysentery to depend upon an accumulation of indurated fæces, will require to be reconsidered, when perhaps it will appear in this, as in other cases, that one of the effects of disease has been mistaken for its cause. In many instances purgative medicines seemed greatly to increase all the sufferings of the patient, and castor oil, the cathartic to

which a preference is usually given, frequently roused the dormant griping pain, so that it appeared that its right to be preferred in this disease, now almost prescriptive, had been too hastily conceded. Finally, we are often cautioned against venesection, which was certainly the remedy the least equivocal in its effects, the most uniformly useful of any which we employed in the Whitworth Hospital. Such modes of practice and cautelæ are doubtless applicable to many forms of the dysentery, otherwise they would not appear in the respectable works in which they are to be found, but their inapplicability in the present instance ought to lead to a distrust of the information contained in systematic works, and to greater confidence in those works which are the result of personal observation.

Of the cases which were not attended with much fever or pain, which were admitted during the first few days of the disease, a purgative early in the morning, a dose of the compound powder of Ipecacuan, (10 grs.) early in the afternoon, and again at bed time, with low diet, (see p. 15) restored many to health; but to reduce our reliance upon this plan within just limits, it must be observed that, in several of these cases, the disease spontaneously ended, as the concurrent fever often did, in free perspiration.

When the disease assumed a more inflexible character, and was attended with considerable pyrexia, tenderness of the abdomen, mucous stools tinged

with blood, together with tormina and tenesmus; in this state I should prefer to the treatment by mercurials, the old proceeding namely, venesection; a purgative, giving a preference to the saline purgatives,—Epsom or Rochelle salts, or the crystals of tartar, very finely levigated, the former in mint water, with a small quantity of tartarized antimony (*gr. i. to ℥viii.* of the solution) in rose tea, or in a light infusion of columbo, the latter in large doses, half an ounce for a dose, moistened with a small quantity of water; then a bath in the evening, and lastly, an opiate, rendered diaphoretic, at bed-time; this method also was frequently successful, when used in an early stage of the disease.

When with pyrexia, the stools chiefly consisted of bloody mucus, and more especially when the abdomen was tender, venesection was never omitted, particularly after I had an opportunity of observing, in the numerous dissections which were made, the havoc wrought by the disease. The blood drawn was, in many cases, cupped and buffed; the tenderness of the abdomen was relieved by blood-letting; the character of the stools was sometimes immediately altered; purgative medicines often failed in producing a change in the appearance of the stools, while a large, feculent, loose stool, without straining, was not unfrequently passed after the loss of sixteen or eighteen ounces of blood, by patients who, for several days before, had passed nothing but mucus mixed with blood. Those who object to venesection in this form of dysentery have surely never witnessed the

great relief which profuse hæmorrhage from the bowels sometimes affords to the patient in dysentery.

But there were cases requiring a procedure still more decided ; cases wherein the disease had resisted the foregoing method so long as to excite an apprehension of extensive ulceration, or in which it began with unusual violence, or in which, after proceeding moderately for a time, symptoms of great danger suddenly arose ; as for instance, intolerance of the slightest pressure, agonizing pain, unceasing tenesmus, great pyrexia ; in these cases the method recommended by some of the late writers on tropical diseases* was used with advantage. In the course of a single hour the patient has been largely blooded, has taken two grains of opium and a scruple of calomel, has had the warm bath, and been swathed in flannel,† by which means we have obtained breathing time to pursue our plans more deliberately. Were the same cases again to be placed under my care, I would not hesitate to prescribe opium in doses of four or five grains, as it was the opium chiefly which seemed to me to arrest the progress of the inflammation, and whatever in such a case procured respite for the patient from agony, sometimes proved of permanent benefit. After the large dose of calomel and opium, calomel in doses of five grains, with half a grain of opium, every third or fourth hour, was given till it produced ptyalism ; as

* See Dr. Johnson's work.

† See Mr. Dewar's work.

soon as the mercurial influence was apparent from the state of the mouth, the mercurial was laid aside, and a mixture with balsam of capivi* was given every fourth or sixth hour, from which the greatest relief was often obtained ; the fæces, from being of a bottle green, and mixed with mucus (the effect of the calomel and opium) and passed with tenesmus, became more natural in appearance, and were voided less frequently ; the patient considered himself cured, and in many cases his recovery followed, although not without interruptions, requiring various changes in the form of the anodyne ; such changes, it may be observed, were generally productive of benefit ; thus, the chalk julep, or catechu mixture, with laudanum, when the capivi draught lost its effect, were substituted. It results from a consideration of the cases in my possession that venesection, calomel, and opium, followed by the capivi mixture, with farinaceous diet, proved more successful than any other method which was adopted in the severest cases ; yet it often lamentably failed, of which sufficient evidence will be found in the table of unsuccessful cases. It ought not to be forgotten, that when the skin was restored to a natural state by the mercury, the case generally proceeded favourably.

It may be asked why was not mercury employed in all the cases ? Because often it did not act kindly, if I may so speak ; and when it did not, the course of the disease was not interrupted by it. Even in the earlier stage of the disease it sometimes failed of

* See Dr. Pemberton's work.

relieving those patients, whose mouths were affected by it. Thus, for instance, I have seen the gums from mercury become tumid, remarkably florid and angry, without salivation. I have a case of this kind distinctly in my recollection, in which the mercurial was instantly discontinued, and baths, opium, and blisters employed; an amendment in the patient's situation took place in consequence; and when amendment had reached a certain point, the mouth became moist from a flow of saliva, and the patient continued to recover rapidly. It seems not unreasonable to suppose that mercury may affect the biliary organs in the same manner that it affected the salivary glands; that it may stimulate them beyond the point of secretion, and thus add to the patient's distress. That mercury, when it produced salivation, even in the earlier stages of the disease, was in many instances unequal to the cure, was established beyond a doubt. Thus, Rose Hayes, (see No. 20) was salivated on the third or fourth day of the disease, and her mouth was extremely sore. Her's was one of many instances, in which it appeared to me that mercury did not exert a benign influence on the constitution. The mouth, in some instances, could not be affected; in others it became sore without a corresponding flow of saliva; in others the saliva flowed excessively, the tongue became inflamed and swelled, and the worst description of the mercurial mouth was produced. In short, it appeared that the atmosphere of the hospital was a means of not merely maintaining the disease, but of counteracting the salutary effect of our most powerful remedy. I have

little doubt that mercury would have succeeded elsewhere, and that the patient would have recovered had she not been in the hospital. At one time, I think in the month of October, calomel with opium was often given in the beginning of dysentery without benefit. When the disease, as we conceived, had attained the ulcerative stage, mercury, which was given on the authority of Clarke, was injurious; but the transition from inflammation to ulceration, as I have already hinted, was not always well marked; finally, the mercurial treatment was of no service, and probably injurious in cases in which emaciation had taken place, and in which the tongue was florid and glazed.

Not so of the lancet, the beneficial use of which was not confined to the commencement of the disease. I have repeatedly ordered venesection, when there was reason to think that ulceration existed in the intestines, and with great temporary relief; and in a few cases, when followed by blisters, mild aperients and anodynes, the relief was permanent. When in the advanced stage of the disease there was much tenderness or pain confined to one region, leeches were preferred to the lancet; but it must be observed that the effusion of blood after leeches applied to the abdomen, when the patient is exhausted, ought to be watched: I have known patients, when neglected, sink in consequence of this effusion, who would have borne a moderate bleeding well.

I have already alluded to a time, during which mercury had nearly lost our confidence ; at that time, when we were doubtful of all the means we had been employing in the cure of this disease, the Whitworth Hospital was visited by a Physician, who said that he thought every case in my wards admitted of cure ; this was not expressed in a charlatanical manner, but from a misplaced confidence in his supposed panacea, which was cream of tartar. Having failed with the assistance of Jackson, Pember-ton, Johnson, and Armstrong, and the masters of former days, we received the suggestion coldly, particularly as the theory of the disease, which this gentleman had adopted, did not correspond with that which we had been led by frequent dissections to form. He said that crystals of tartar was a medicine powerfully antiseptic, the most so of any ; and he conceived that dysentery essentially depended on the active operation of a prevailing septic principle in the body. However, the practice which he recommended was fairly tried. He administered the medicine, which he required to be very finely levigated, to many of the patients with his own hands. The dose to an adult was half an ounce, which was repeated every fourth or sixth hour. We soon discovered that this medicine, when taken precisely as prescribed, failed in many instances, but it must be allowed that some patients who took it were restored to health, who, I think, would have sunk under any of the methods of treatment then in use ; and the white powders, as they were called, became a favorite medicine in the hospital during the

continuance of dysentery. The first dose of cream of tartar sometimes aggravated the patient's distress so much, that several individuals refused to take a second. But, when persevered in, it often brought down bile, and then by giving it only once or twice in the day, and alternating with it Dover's powder, the capivi, or chalk mixture, and using baths, the cure was completed. The gentleman who suggested the use of crystals of tartar, thought this medicine all sufficient, and those other means superfluous.

I suspect that the exhibition of large doses of crystals of tartar was first proposed by Selle, or some older continental author. In bilious dysenteries, Selle recommends "*Vesicatorium abdomini imponendum, pulpaque tamarindorum, et cremore tartari ad aliquot uncias per diem, alvus movenda. De dysenteria. Selle de curandis morbis, p. 157.*"

In the property of bringing down bile, I think it must be admitted that the cream of tartar excels most other purgative medicines, and in this way its efficacy in dysentery may probably be explained, for that the suspension of the biliary discharge is a very important part of the disease few will deny, who have seen the great relief which sometimes, in this disease, follows a discharge of bile. An observation made by Home relative to cream of tartar is perhaps deserving of more attention than has been paid to it. He considers the efficacy of cream of tartar in dropsy to depend on its resolving obstructions in the liver; and he adds, that he has often used it with

great success in obstructions of the liver. *Clinical Experiments*, p. 383.

Castor oil, as I have already mentioned, often produced much aggravation of tormina and tenesmus, and hence when exhibited it ought to be combined with an opiate; half an ounce or six drachms, combined with ten or twelve drops of laudanum; and this, it may be remarked, is often an invaluable combination in irritations of the mucous membrane of the bowels, whether chronic or acute, which require aperient medicines. When castor oil was combined with rectified oil of turpentine, instead of being more severe in its operation,—productive of more uneasiness, it operated with less pain than when given without the oil of turpentine. This, which is also a valuable combination, borrowed from puerperal practice, and much used in Dublin, sometimes effectually reduced that tumefaction of the belly which often so much distressed the patient. The common saline purgatives appeared to us of more easy operation than purgatives derived from the vegetable kingdom, such as rhubarb, senna or castor oil, which, I believe, are chiefly applicable to that species of dysentery in which there are scybala to be removed.

A very full trial was given to injections, and of these I prescribed a great variety: laudanum in mucilage, starch or linseed tea, which produced the usual sedative effect; and suppositories of opium were sometimes very useful. There were some pre

parations, not in general use as injections, tried, such as the black wash, a weak solution of the nitrate of silver, rectified oil of turpentine rubbed up with mucilage, but without any decisive result: much less irritation was produced by them than might have been expected, but they did not check the disease. Equal parts of lime water and milk, a pint of each, with the addition of laudanum, was found a very good injection. A solution of the superacetate of lead, combined with an opiate, ranked high with us. This salt of lead, combined with opium, has lately been given in dysentery by my friend Dr. Barker in the form of pills, and I think he reports favourably of it. In the diarrhœa, or dysentery of the latter stage of phthisis, which generally depends on ulceration of the intestines, these pills will be found a good palliative.

With respect to diet, farinaceous food seemed entitled to a preference. We endeavoured to avoid as much as possible any kind of nutriment which had a tendency to quicken the pulse, or to leave much fecal residuum.

ABRIDGED CASES AND DISSECTIONS.

1. ——— Maher, *admitted* August 19th, 1818, into the Whitworth Hospital, on the fifth day of an attack of dysentery, which arose after fever. *Symptoms on admission.* Abdomen intolerant of pressure; tormina and tenesmus; mucous stools, tinged with blood; quick pulse. 21st. Very acute pain in the bowels. 24th. Excruciating tormina; unceasing tenesmus; extreme tenderness of the belly,—in extreme agony. 25th. Being the 11th day, Death. *Principal remedies.* 21st. *V. S. Pulv. Ipec. Comp. gr. x. 6tis horis. flannel swathe.* 23d. *Ol. Ricini cum Tinct. Opii.* 24th. *V. S. &c.* *Dissection.* Most extensive ulcerations of the great intestines; the largest portion of sound mucous membrane did not exceed an inch square; the exposed surface black, and in many parts eroded; in other parts the muscular fibres were of a natural appearance. The ulcerations stopped abruptly, at about three inches from the end of the ileum; the upper part of the small intestines was pretty sound.

2. Eliza Morris, æt. 34. *Admitted* 21st of August, on the 8th day of her illness. *Symptoms.* Tormina; frequent stools; anxiety; furred tongue;

quick pulse ; severe headach, and general pains. 22d. Tenderness of the epigastrium. 23d. Constant vomiting ; tormina ; bloody stools ; tenesmus ; great tenderness of the belly ; yellow and furred tongue ; insufferably bad taste ; excessive thirst ; prostration. 25th. Quick returns of tenesmus, with scarcely any evacuation ; black tongue. 27th. Being the 14th day, Death. *Remedies.* 21st. *Hirudines Temporibus.* *Oleum Ricini cum Tinct. Opii.* 22d. *Hirudines* xii. *Epigastrio.* *Vesicatorium Nuchæ.* *Pulv. Ipec. Comp.* 23d. *Mist. Olei Ricini cum Tinct. Opii & Vin. Ipecac.* 26th. *Sol. Sulph. Magn. in Infus. Rosæ cum Tinct. Opii.* *Dissection.* Effusion of yellow lymph, with a granulated surface, on the villous coat of nearly the whole of the jejunum, which effusion could easily be separated in the form of a membrane ; the mucous membrane vascular and thickened. The large intestines were slightly thickened, and more vascular than natural ; numerous circular small depressions, circumscribed and vascular, not larger than a pin's head, occupied the whole extent of their mucous membrane. In the centre of the colon the mucous membrane was rough, granulated ; the granulations grey, and interspersed with very superficial erosions.

3. Mary Mahon, æt. 28. *Admitted* September 6th, on the 5th day of her illness. *Symptoms.* Tenderness of the epigastrium ; general pains ; headach. To the tenderness of the epigastrium, and general pains, were added oppression of the chest, cough, and copious expectoration. September 14th.

Incessant cough, and expectoration ; severe tormina ; discharge of blood by stool. September 16th. Relief of the dysenteric symptoms ; aggravation of the pulmonary disease ; extreme prostration. September 18th. Death. *Remedies.* September 6th. *Hirudines duodecim epigastrio.* 14th. *Oleum Ricini. Pulv. Ipec. Comp.* *Dissection.* The lungs in a state of great sanguineous congestion ; their substance preternaturally firm ; the trachea and its ramifications contained a large quantity of thick glairy mucus. The mucous membrane of the large intestines, throughout its whole extent, had its vascularity much increased, but was free from ulceration.

4. Michael Hagan, æt. 37. *Admitted* September 9th, being the 9th day of dysentery, which he attributed to his having sat on the damp grass when overheated. *Symptoms.* Tormina ; frequent desire to go to stool ; stools small, and consisting of mucus, slightly tinged with blood ; abdomen tense and tender ; tongue grey, clean at the edges ; thirst ; pulse 96. 10th. Pure blood by stool. 11th. Dryness of the skin ; vigilance. 12th. Brown tongue ; hiccup. 13th. Excessive thirst. 15th. Anorexia ; languor ; a fibrous substance observed in the feces. 19th. A stool every quarter of an hour. 21st. Extremities cold. 22d. Gums affected with mercury. 23d. Breathing suspirious, slow, laborious, wheezing ; excessive debility. 24th. Being in the 4th week of his illness, Death. *Remedies.* 9th. *V. S. Balneum. Pulv. Ipec. Comp.* 11th. *V. S. Tart. Sodæ et Kali in Mist. Salina. Enema Amyli.* 12th.

Opii gr. i. 4tis. horis. Aq. Calcis. Flannel roller, &c.
 15th. *Hydr. Subm. Pulv. Ipec. aa. gr. i. Opii gr. $\frac{1}{4}$*
2dis. horis. 21st. Mist. Catechu. Wine, Sago,
&c. Dissection. Left lung and parietes adherent.
 Gall bladder empty. Stomach coated with a yellowish glairy secretion. Very vascular patch to the right of the œsophagus. Yellow feces in the small intestines; dark green in the large. Mucous membrane at the end of the ileum highly vascular. All the coats of the colon thickened; its mucous membrane of a dark bottle green, collected into rugæ, and studded with small round ulcers. Lower end of the colon, and upper end of the rectum, coated with numerous small depositions of lymph, beneath which the surface was not ulcerated.

5. Sally Cox, widow, æt. 56. *Admitted* September 14th, on the 8th day of dysentery, with which she was attacked in the second week of a fever, which she thought arose from cold. *Symptoms.* Has just passed about half a pint of blood mixed with mucus. Abdomen tense and tender; tormina; tenesmus; anorexia; tongue brown, furred, dry in the centre; moist at the edges; pulse 108. 16th. Skin hot; pulse 120, hard. 18th. Frequent stools of a greenish yellow colour; strength sunk, lethargic; pulse small; hiccup; tenderness of the right hypochondrium. 19th. Being about the 12th day, Death. *Remedies.* September 14th. *Pulv. Ipec. Calom. a gr. i. 2dis. horis.* 15th. *Vesicatorium.* 16th. *V. S.* 18th. *Vini Ipec. 3ss. Haustus Anod.* *Dissection.* Mucous membrane of the last four inches

of the ileum highly vascular. Great intestines vascular externally; their coats thickened; mucous membrane very vascular, and every where beset with small ulcers, which, with one exception, affected that membrane only; one large ulcer in the transverse arch of the colon penetrated to the peritoneum. The rectum, about four inches from its termination, when held up to the light, looked like a sieve, from the number of ulcerations.

6. Judith Macabe, widow, æt. 30. *Admitted* September 15th, having laboured under dysentery for two months. She had an attack of fever about two months ago, and a second attack about five weeks ago, both attended with symptoms of dysentery; the fevers were supposed to have arisen from having lain on a damp floor. *Symptoms.* Tenderness of the abdomen; tormina; frequent desire to go to stool; scanty discharges, chiefly of mucus, mixed with blood; tenesmus; tongue white and furred; anorexia; pulse 114, hard; skin hot. 16th. Cough. 17th. Dyspnœa; dysury; œdema of right foot and hand; sudden and remarkable debility; many brown loose stools without tormina. 18th. Great restlessness; short, teasing, loose cough; respiration 54; pale; lips livid. 19th. Countenance cadaverous. Death, being in the 10th week. *Remedies.* September 15th. *Hydr. Subm. gr. i. P. Ipec. gr. iss. Opii gr. ¼ 3iis horis.* 18th. *Vesicatorium amplum. Mist. Camphoræ cum Liq. Æth. Oleos.* *Dissection.* Some fluid in the thorax. An accumulation of blood in the substance of the lungs. Two abscesses in the

liver, one large and full of purulent matter. Commencing at the ileum, there were numerous broad irregular ulcerations, many of which were covered with sloughs penetrating to the peritoneal coat, these were more numerous as they approached the anus.

7. Thomas Campbell, æt. 20. *Admitted* September 19th, on the 5th day of his illness, which arose during slow recovery from a fever, which commenced five or six weeks ago. *Symptoms.* Abdomen tense, and intolerant of pressure ; a stool, nearly consisting of pure blood, passed every quarter of an hour ; tenesmus ; pulse 102 ; a brownish yellow furring of the tongue. 20th. Umbilical region very tender. 22d. Tongue much loaded. 27th. Debility increasing, with delusive hope. 28th. Fleshy-like substances passed by stool. 29th. Suddenly attacked with dyspnœa. 30th. Colliquative sweats. October 1st. Extreme weakness ; patch of red on the wasted cheek. 2d. Tormina ; tenesmus gone ; great oppression of the breathing. 3d. Being about the 20th day, Death. *Remedies.* 19th. *V. S. Hyd. Subm. Pulv. Ipec. a gr. i. 2dis. horis.* 20th. *Hirudines. Mistura Catechu cum Tinct. Opii.* 22d. *Pulv. Ipec. ʒi.* 23d. *Mist. Sulph. Mag. cum. Ant. Tart. Opii gra. ii. Hydr. Subm. gra. vi. h. s. Enema Amyli cum Tinct. Opii. Balneum.* 27th. *Mistura Copaibæ cum Tinct. Opii.* 29th. *Vesicatorum Sterno.* *Dissection.* Blood in the interstitial substance of the lungs ; puriform matter issued from the bronchia ; liver in a state of much sanguineous congestion ;

small round ulcerations of the mucous coat from the commencement of the colon, which increased in number as the rectum was approached. Coats of the great intestines thickened. Mucous membrane of the rectum rough, and elevated into points, covered with depositions of lymph, and beset with extensive ulcerations.

8. Neill Harkan, æt. 22. *Admitted* on the 20th of September, being the second day of his illness, which arose during recovery from a protracted fever. *Symptoms.* Mucous stools slightly tinged with blood, tenesmus; debility; confusion of intellect; p. 96; skin hot; tongue furred and brown; thirst. 22d. *Remitted* to the Fever Hospital. October 7th. *Re-admitted.* 8th. Abdomen intolerant of pressure, especially the hypogastric region. 27th. Emaciation; debility. 28th. Short teasing cough, with inability to expectorate; countenance sunk. 30th. Tongue black; suffocation; sore throat. November 1, being about the end of the 6th week, Death. *Remedies.* September 20th, *V.S. Sulph. magn. in aq. menthæ. Hydr. subm. Pulv. ipec. comp. aa. gr. sex, 8vis horis.* October 7th. *Enema superacetatis, plumbi, &c. Mist. Copaibæ. Flannel roller, &c.* 12th. *Opii gr. duo. Hydr. subm. gr. xv.* 19th. *Enema Lot. Hydrarg. nigr.* 27th. *Mistura Cretæ, &c.* *Dissection.* Lungs contained an unusual quantity of florid blood. The coats of the great intestines were thickened and indurated, their mucous membrane ulcerated throughout its whole extent; speckled with many dark blue spots, which increased in number

towards the rectum. The muscular fibres in many places laid bare, as if by careful dissection. There were numerous cavities between the mucous and muscular coats of the rectum, large enough to contain peas; these were filled with a gelatinous matter.

9. John Conolly, æt. 48. *Admitted* September 21st, after an illness of three weeks, which arose during recovery from a fever, in which the head and stomach were much affected. *Symptoms.* Tormina; frequent scanty mucous stools of a greenish colour; tenesmus; abdomen tense and tender on pressure; tongue brown; much thirst; anorexia; pulse 102. 22d. Vigilance; some dyspnœa; tongue with a brown coating. 23d. Stools like chopped spinach; p. small. 25th. Much debility. 26th. Subsultus; harassing thirst. Death about the end of the 4th week of his illness. *Remedies.* 21st. *Hydrarg. Subm. Pulv. Ipec. aa. gr. i. Opii gr. ½ 3tiis horis. Forv. abdomen. Balneum.* 22d. *Pulv. Ipec ʒi.* 25th. *Mist. Copaibæ.* *Dissection.* The whole extent of the internal surface of the great intestines ulcerated; by the larger ulcers the mucous coat was entirely destroyed. The lower part of the colon was much contracted. The internal surface of the stomach was of a deep red colour.

10. John Spencer, æt. 50, *admitted* September 23d, after an illness of three weeks, which arose while he was apparently recovering from a fever, without any remarkable symptom. *Symptoms.* Had

suffered much from tormina and tenesmus. Thin green stools ; white tongue ; anorexia ; p. 96. 24th. Return of tormina ; extreme thirst ; tongue furred at the apex. 26th. Stools like flummery. October 1st. Bowels moved immediately after taking drink. 2d. Hiccup. 4th. Hiccup produced by taking drink. 5th. Great languor. 7th. Extreme debility, 8th. Despondency ; great thirst. 9th. Death, about the end of the 5th week. *Remedies.* September 23d. *Pil. ex Opio, Pil. Hydr. & Pulv. Ipec. Enemata.* 24th. *Mist. Capaibæ.* October 2d. *Enema superacetat. Plumbi, &c. Vinum.* 5th. *Pulv. Doveri h. s.* 6th. *Mist. Cretæ.* 7th. *Tapioca, &c. Dissection.* Vena portarum distended with blood. Veins of the stomach turgid ; caput coli contracted ; its villous coat partly superficially ulcerated, partly coated with lymph. The colon in a similar state ; its ulcerations were larger, and black spots were interspersed. In the rectum the black gangrenous looking spots were numerous ; here also the ulcerations did not penetrate deeper than the mucous membrane. Black spots were observed in the meso cæcum.

11. Farrel Reilly, labourer, æt. 58. *Admitted* Sept. 24th, in the 3d week of his illness, which arose during convalescence from a fever, which was attended with tormina, and was attributed to fatigue. *Symptoms.* Tormina ; tenesmus ; thin, brown, bloody stools, extreme tenderness of the umbilical region ; clean tongue ; thirst ; anorexia ; pulse 120, and weak ; extreme exhaustion. 25th. *Vigilance.*

Cessation of tormina, tenesmus, and tenderness of the abdomen, the stools flowing involuntarily ; tongue with a brown fur. *Remedies.* 24th. *Hirudines. Balneum. Hydr. Subm.* 25th. *Mist. Copaibæ.* *Dissection.* Liver loaded with dark blood. Mucous membrane of the large intestines thickened, its folds one-third of an inch thick, dense and rough. Surface of the membrane beset with ulcers, from an inch to a few lines in diameter, formed by destruction of the membrane, which, in some places, had sloughed. Internal surface of the stomach deep red ; of the duodenum brighter, with numerous bloody dots. Mesenteric glands enlarged.

12. Thomas Cullen, sailor, æt. 40. *Admitted* September 26th, on the 5th day of illness, which began when he was about a week convalescent from a third attack of fever, during which his bowels were not affected. *Symptoms.* His stools consist of flocculent mucus, with much blood ; they are preceded by tormina followed by tenesmus. Tongue white and furred ; thirst considerable ; pulse 78. 28th. Stools like spinach mixed with blood. 29th. Slight ptyalism ; abatement of disease. October 1st. Gums sore, but no spitting ; debility. 3d. Stools pale grey. 7th. Sickness and oppression. 8th. Straining without any discharge. Nov. 6th. Œdema of inferior extremities. 12th. Emaciation ; delusive hopes. Tongue of a brick red colour. 27th. A thin reddish fluid flowing incessantly from the bowels. 28th. Death, at the end of two months. *Remedies.* September 26th. *V. S. Hydr. Sub. gr. v. Opii gr.*

ss. 4tis. horis. 27th. Balneum. October 1st. Hydr. Subm. et Opium. 7th. Vin. Ipecac. Nov. 6th. Enema Sol. Nitratis Argenti, &c. 8th. Ol. Ricin. cum Tinct. Opii. Mist. Copaib. 10th. Mist. Angust. Suppositories, lead glysters, Lime Water ditto. Ac. Nitr. cum opio. &c. Dissection. Liver of a dark colour. Duodenum very vascular. Mucous membrane of the great intestines of a blackish brown colour. Superficial ulcerations of an oval form in the colon; more numerous in the transverse arch. The descending colon much ulcerated, the ulcers penetrating to the muscular coat. All the coats of the intestines thickened. The last three inches of the rectum nearly sound.

13. Mary Ryan, widow, æt. 40. *Admitted September 28th, after an illness of five weeks. Symptoms.* Tormina; stools frequent, small, mucous, and tinged with blood; tenesmus; tongue foul; pulse quick; skin hot. 30th. Stools bloody, with a fleshy like substance intermixed. Abdomen tender, pulse 120. Tongue white, clammy; thirst; anorexia. October, 1st. Pulse 150 and small; tongue black; languor. 2d. Vomiting; moaning; supine; extreme prostration and oppression. 3d. Death, in the 6th week of her illness. *Remedies.* September 28th. *Hydr. Submur. ʒi Opii. gra. duo. Hydr. Submur. gr. quinque Opii gr. ss. 6tis. horis. Balneum. Flannel roller and compress.* October 1st. *Mist. Camph. cum Tinct. Opii et Liq. Æth. Ol. &c. Dissection.* Thin greenish fæces in the small intestines, interspersed with a few hard

lumps. Large intestines thickened. Mucous membrane rough, irregular, tuberculated, and with numerous superficial ulcers having elevated edges; their surfaces smeared with a substance like the pigmentum nigrum; little vascularity of the intestines. A size injection did not penetrate the tubercles.

14. Esther Derham, widow, æt. 45. *Admitted* on the 1st of October. She had probably laboured under fever, as her head had been recently shaved. *Symptoms.* Incoherent. Stools involuntary. Abdomen tense and tender. Tongue furred, pulse 144. Resp. 42. Skin cool. October 2d. Stools frequent and bloody; tongue swollen and brown; respiration hurried; extremities cold; pulse scarcely perceptible. 3d. Death. *Remedies.* October 2d. *Mist. Cretæ*, ℥vi. *cum Tinct. Opii.* ʒi ss. *Vini Ipec.* ʒiii. ʒi. *Post sedes liquidas.* *Dissection.* Turgescence of the vessels of the mucous membrane of the colon. The surface rough, and elevated into hard and grey horizontal rugæ. Great vascularity of the rectum. No appearance of ulceration in the small or great intestines.

15. James Nagle, servant, æt. 64. *Admitted* on the 1st of October, having been nine weeks ill. His illness was supposed to arise from drinking ale and butter milk. *Symptoms.* Tormina, tenesmus, and frequent stools; stools muddy red, and consisting chiefly of blood; abdomen tense and tender; tongue white; anorexia; pulse 102. 2d. Voided

several tough strings of coagulable lymph. Tenderness of the lower part of the abdomen. 3d. Tongue furred; thirst. 8th. Rapid pulse. 11th. Involuntary stools. October 12th. Death in the 11th week. *Remedies.* *Enema Superacetat. Plumbi.* 3d. *Mist. Catechu, &c.* 5th. *Decoct. Angust. &c.* *Enema Infusi Lini cum Tinct. Opii.* *Wine, &c.* *Dissection.* Liver enlarged, jejunum vascular; caput coli gangrenous; a hole in the iliac portion two inches in diameter. Villous coat of the colon in a sloughy state, and ulcerated in the sigmoid flexure; the three coats sloughy. The villous was detached, but preserved its cylindrical form. Vessels of the rectum in a turgid state; all its coats thickened. Increased vascularity in many parts of the peritoneum.

16. Martin Dunn, soldier, æt. 29. *Admitted* on the 3d October, having been upwards of three weeks ill. *Symptoms.* Emaciation; frequent dark brown stools without blood; fullness of epigastric and right hypochondriac regions; tongue white and furred; anorexia. 4th. Thirst; vomiting of greenish matter; feeble pulse; tremors; tormina; tenesmus; brown tongue with glazed edges; sordes on the teeth; prostration; lethargy. October 7th. Death, at the end of 4th week. *Remedies.* 3d. *Mistura Copaibæ.* *Enema Acetat. Plumbi.* *Vinum.* *Dissection.* Right lung adherent. Liver tuberculated, its left lobe diminished. Spleen hard and enlarged. Mucous membrane of the great intestines vascular, beset with small ulcers, having coagulated lymph between. In the rectum there were several

inches of the mucous membrane lined with coagulable lymph, on either side of which there were numerous ulcerations.

17. Bryan Kearns, labourer, æt. 40. *Admitted* October 11th, having been three weeks ill. The complaint arose after exposure to cold. *Symptoms.* Tormina ; frequent thin dark brown stools ; tenderness particularly of right hypochondrium, which was tumid ; vomiting ; pulse 168, and feeble ; hiccup. October 12th. Death, about the end of third week. *Remedies.* 11th. *Haust. Olei Ricini, &c. Hirudines xii. parti dol. Balneum Vespere. Pulv. Ipecac. Comp. ℥i. h. s. Dissection.* Gall bladder turgid. Bilious fluid in the stomach. Duodenum vascular. Ileum ulcerated ; ulcerations about a line in diameter. Caput coli sphacelated. Great part of the colon destroyed ; its contents in the cavity of the abdomen. Mucous coat of the rectum sphacelated. Dark spots in the mesentery and meso-colon.

18. Mary Dunne, widow, æt. 23. Catamenia regular. *Admitted* October 24th, having been three weeks ill. Illness commenced on the 3d, after the crisis of fever, with pain in the epigastrium. *Symptoms.* Constant pain, and a tumour in the epigastrium ; lips livid ; respiration hurried ; tongue white ; anorexia ; pulse 96. Belly regular. 27th. Though her mouth was very sore from mercury, the pain, which had subsided, recurred. Six loose stools in the night. 31st. Passed blood by

stool ; pain subsiding. November 7th. Return of epigastric tumour with tenderness ; hurried respiration and dysenteric symptoms. 13th. Large quantity of purulent matter evacuated from the tumour by incision. Irritability of stomach. 15th. Vomiting of bloody fluid. Purging of ditto. November 16th. Death, at the end of sixth week. *Remedies.* October 26th. *V. S. Submur. Hydrarg.* ℞i. *Opii gr.* ii. *R. Submur. Hydr.* ℞i. *Opii.* gr. iii. *M. st. Pulv. No. vi. S. 1 quarta q. q. hora* *Hirudines.* 28th. *Haust. Anod. Balneum.* 31st. *Haust. Efferv. cum Tinct. Opii. Cataplasma. Emoll. Vinum. Enemata Amyli, &c.* *Dissection.* The cavity of the abscess in the liver was so contracted as not to be more than large enough to contain a walnut. There was a second small abscess in the right lobe of the liver. The colon and the folds of the peritoneum attached to it much thickened ; its mucous membrane hanging in dirty shreds, as if in a state of slough.

19. John Smyth, labourer, æt. 42. *Admitted* November 3d. Duration of illness uncertain. *Symptoms.* Severe pain in the bowels ; stools green ; abdomen tender and impatient of the slightest pressure. 4th. Pulse hard. 6th. Violent attack of colic ; tenderness of the abdomen. 7th. Bowels confined. 9th. Tormina ; frequent small red stools. 12th. *Remitted* to the fever ward. *Remedies.* November 3d. *Hirudines. Haustus Olei Ricini cum Oleo Terebinth.* 4th. *V. S. Balneum.* 5th. *Enema Terebinth.* 6th. *V. S. Balneum. Haust. Olei Ricini.*

Pulv. Ipecac. Comp. Dissection. Last two inches of the mucous membrane of the ileum apparently gangrenous. Coats of the large intestines thickened. Two perforations of the colon from ulceration. Escape of feces. Mucous membrane in a shreddy state, apparently from sloughing. Within six inches of the anus it became sound.

20. Rose Hayes, æt. 25. *Admitted* November 9th, having been three days ill. Dysentery commenced on the day after her admission in fever into the Richmond General Penitentiary. *Symptoms.* Tormina; tenesmus, and bloody stools; skin hot; pulse 108; has had a cough for six months; catamenia absent two years. November 10th. Ptyalism. 13th. Abdomen impatient of pressure. 15th. Stupor; incoherence; bowels more natural. 17th. Gradual sinking of strength. 18th. Death, after twelve days sickness. *Remedies.* November 9th. *V. S.* & *Pulv. Ipecac. Calom. aa gr. xii. Opii gr. iss. M. ft. Pulv. xii. s. 1. tertiis horis.* 13th. *Pulv. Ipecac. Comp. ℥i. Sol. Sulph. Magnes.* 15th. *Vinum. Mistur. Camph. &c.* *Dissection.* Liver contained an unusual quantity of dark blood. Spleen diseased. Intestines sound, save the rectum, the mucous membrane of which was slightly tuberculated, and somewhat more vascular than natural. The tuberculated appearance arose from a granular deposition of lymph.

21. Amelia Crow, æt. 40. *Admitted* November 11th, having been four days ill. The disease began

during convalescence from fever. *Symptoms.* Tension and tenderness of the abdomen; tormina; tenesmus, and bloody stools. November 13th. Pulse 116. 16th. Languor; apathy; inability to protrude her tongue, which is dry, clean, and as it were varnished. 18th. Involuntary stools; pulse 160. 19th. Supine; breathing laborious; countenance sunk; mouth sordid. November 20th. Death, at the end of a fortnight. *Remedies.* 11th November. *V. S. Sulph. Magnes. in Aqua Menthæ. Balneum.* 13th. *Hydrarg. Submur. ℥ii. Opii gr. ii. M. ft. Pulv. viii. s. l. sextis horis.* 16th. *Mist. Copaibæ. Vinum.* *Dissection.* Bronchial tubes containing a large quantity of white mucus. A number of calculi in the pelvis of the right kidney. The only diseased appearances in the intestines were a few puncta of the mucous coat, at the termination of the rectum, and a deposition of lymph in a small portion of the sigmoid flexure of the colon.

22. Mary Baillie, æt. 23. *Admitted* November 14th, having been five weeks ill; no fever; health previously good; catamenia regular. *Symptoms.* Is afraid to drink, lest it should send her to stool; tormina; tenesmus; stools yesterday were bloody; stitch in the left side; great tenderness of epigastrium; hiccup; pulse 114. November 15th. Death, after five weeks illness. *Remedies.* 14th. *Hirudines. Balneum. Hydrarg. Sub. Mur. ℥i. Opii gra. ii. M. post horas duas. Sol. Sulph. Magn. Alvo subducta Bol. e Cal. et Opio sextis horis.* *Dissection.* Great intestines thickened. Mucous membrane almost de-

stroyed by ulceration, which extended from a few inches above the valve of the ileum to the anus, where the ulcerations were confluent; there were every where attached to the ulcers dirty brown shreds, like parts in a state of slough.

23. Thomas Sherly, æt. 21, Brass Turner. *Admitted* November 16th, having been ill eleven weeks. Cause—exposure to cold. *Symptoms.* Tormina; tenesmus; frequent stools (no longer bloody), green and watery; tenderness of the epigastrium; tongue white, furred; pulse 120; countenance sunk; cough. November 19th. Skin very hot. 22d. Tongue florid; blistered. 23d. Stools like grumous blood, without smell. 27th. Oppression of chest, and cough. December 4th. Much emaciation; swelling of feet; sore throat. 21st. Sudden attack of debility, and sinking. 31st. Mouth blistered. On the 2d of January, death, after between four and five months illness. *Remedies.* November 16th. *Balneum. Pulv. Dov. Flannel roller.* November 17th. *Pil. Hydrarg. Opium & Pulv. Ipecac.* 27th. *V. S.* December 3d. *Haust. Anodyn.* 7th. *Mist. Copaibæ.* 21st. *Vinum. Mist. Anod. &c. Dissection.* Inflammation, abrasion, ulceration, and sloughing of the colon; more remarkable in the ascending and transverse arch than towards the rectum. Ulceration and slough of the internal surface of the caput coli, and valve of the ileum. Colon contracted; its coats thickened. Mesenteric glands enlarged and hard. Colon adherent to the liver; a circumscribed

tumor, containing cheesy matter, in the surface of its right lobe. Lungs tuberculated.

24. Mary Burne, widow, æt. 54. *Admitted* November 19th, having been ill seven weeks, after fever, followed by anasarca. *Symptoms.* Debility; tormina; tenesmus; umbilical region tender; emaciation; stools no longer bloody; tongue brown and crusted; thirst; pulse 108, weak. 22d November, Abdomen impatient of pressure; debility increasing; great tremor of the hands; anxious to have wine. 24th. Sudden weakness, and raving in the night; laborious respiration; countenance sunk; eyes staring; involuntary stools of a natural appearance. November 24th, death in the eighth week. *Remedies.* November 19th. *Mistura Catechu cum Tinct. Opii.* 22d. *Vinum.* *Dissection.* Lungs more solid than usual. Liver large, pale, and flabby. Numerous and extensive ulcerations from the transverse arch of the colon to the anus. The rectum less ulcerated than the colon. The ulcerations were large, circular, collected into groupes, and laying bare the muscular fibres; their edges were smooth and prominent; the intervening membrane was sound, unless in the centre of the descending colon, where it was much thickened and elevated.

25. John Gibbons, sailor, æt. 35. *Admitted* November 19th, having been ill two months; illness arose after a fever. *Symptoms.* Tormina; frequent bloody stools; tenesmus; tenderness of abdomen; tongue white; thirst; skin dry and rough. 22d. Cough. 23d.

Skin very dry, 25th. Large and painful hæmorrhoids. 27th. Involuntary stools. December 2d. Great emaciation. 22d. The emaciation and debility remarkably increased. 30th December, death, between the third and fourth month. *Remedies.* November 19th. *Calom.* *Opium et P. Ipecac.* *Balneum.* 23d. *Mist. cum Vin. Antim.* 25th. \mathfrak{R} . *Acidi Nitrici* \mathfrak{z} iii. *Opii gr.* iii. *Aquæ* \mathfrak{z} ii. *M.* \mathfrak{z} i. *ter de die, e cyatho aquæ.* 27th. *Vesicat.* *Mist. Catechu.* 28th. *Pulv. Dov.* December 16th. *Cryst. Tart.* *Dissection.* High inflammation, thickening, abrasion, and ulceration of the mucous membrane of the colon. In the descending colon the mucous surface was destroyed, with the exception of here and there small portions, with vascular edges as clean as if cut with a knife. Mesenteric glands enlarged.

26. Patrick Nowlan, labourer, æt. 34. *Admitted* December 5th, having been ill fourteen weeks. No fever. *Symptoms.* A stool every hour, consisting of grumous blood and pus, with a little feces. Emaciation. Tongue moist and furred. Pulse 80. 13th. Was almost constantly at stool all night. 17th. Great exhaustion. 22d. Umbilical region very tender on pressure. Great soreness in the bowels after stool. 23d. Extreme exhaustion. On the 25th December, death, after 17 weeks illness. *Remedies.* December 5th. *Super Tart.* *Kali.* 9th. *Mist. Bals. Copaib.* 17th. *Mist. Cretæ cum Tinct. Opii & Vin. Ipec.* 19th. *Pil. Opii gr.* v. *sextis horis.* 22d. *Pulv. Doveri.* 23d. *Wine, Sago, &c.* *Dissection.* Serous effusion under the arachnoid.

3i. of fluid in either ventricle. There remained no sound mucous surface from the valve of the ileum to the end of the transverse arch of the colon, except one patch about an inch in diameter; from that point to the anus there were numerous portions of mucous membrane, which had not the appearance of abrasion.

27. Amelia Henry, æt. 30. four months pregnant. *Admitted* December 4th, after having been five weeks ill. Lay in the same bed with her husband, who had dysentery. No fever. *Symptoms.* Tormina, tenesmus, and frequent stools, which have been bloody, with slime; epigastrium tender; pain in either side of it; vigilance; skin dry; tongue white; anorexia; pulse 120. 7th. Much epigastric tenderness; pulse feeble; deep red patch on either cheek. 8th. Excruciating pain of side; continued tenesmus without any discharge; abdomen tender. 10th. Aborted. 12th. Stupor; involuntary discharges from the bowels. December 12th, after six weeks of illness, death. *Remedies.* December 4th. *V. S.* Sulph. Magnes. in Aqua Menthæ. 5th. *V. S.* Super Tart. Kali. 8th. Vesicatorium. Opium. Haust. Rhei. 9th. Balneum. Mistura Copaibæ. 11th. Calom. 3i. Opii gr. ii. *Dissection.* A very extensive abscess of the liver, which contained nearly six pints of whey-like matter, mixed with flakes of lymph; large masses of which were connected with the walls of the abscess. At the lateral and posterior part of the right lobe, it

seemed inclined to point. The mucous membrane of the great intestines was extremely ulcerated.

28. Michael Henretty, shoemaker, æt. 40. *Admitted* December 7th, having been ill a month. Just before he fell sick, had slept in the same bed with a young man in dysentery; had been a hard liver. *Symptoms.* Abdomen tender; frequent stools of bloody mucus and purulent matter; tongue white, furred; excessive thirst; anorexia; pulse 76; hæmorrhoids, with heat and pain in the rectum. 11th. Aggravation of symptoms. 15th. Sickness of stomach. 19th. Inclination to go to stool whenever he takes food. 26th. Strength sunk. 28th. Severe pain in the right side; painful inspiration; pulse 80; feeble. 29th. Hiccup. 30th. Stools more natural; sore throat; delirium. December 31st, end of eighth week, death. *Remedies.* December 7th. *Pil. Hydr. et Opium.* 10th. *Super Tart. Kali.* 12th. *V. S. Calom. ℥i. Opii gr. ii. Balneum.* 13th. *Cal. et Opium.* 17th. *Mist. Cretæ cum Vin. Ipec. Tinct. Opii et Pulv. Rhei.* 24th. *Vinum.* 25th. *Vesicatorium. Opium. Turpentine Liniment.* *Dissection.* Irregular ulcers on the whole of the mucous membrane of the intestines; some of them several inches in circumference; the intervening membrane thickened. Several considerable portions of membrane in a state of slough, and loose in the colon, particularly in the cœcum and in the rectum also. Small intestines sound. Liver very large and full of abscesses containing

yellow pus. Numerous opaque spots on the internal membrane of the descending aorta,

29. Mary Kelly, æt. 19. *Admitted* December 15th. Two days ill; illness commenced during convalescence from fever, supposed from cold. *Symptoms.* Fixed pain of abdomen; tormina; tenesmus, and frequent bloody stools; vomiting; white tongue. 18th. Frequent hard pulse; hot dry skin. 19th. Retching; excruciating tormina; tenesmus; abdomen intolerant of the slightest pressure; hurried breathing. 21st. Restlessness; hiccup; burning at the scrobiculus cordis; retching. 23d. Convulsions. Died December 29th, on the tenth day. *Remedies.* 15th. *V.S.* *Calom.* ℥i. *Opii gra.* ii. *M. Opii gr. ss. Calom. gr. v. quartis horis.* 16th. *Bal-neum. Vesicatorium.* 18th. *Cryst. Tart.* 20th. *Hirud.xx. Enema Amyli. Foveatur abdomen. Opium et Calom.* *Dissection.* An ounce of serum in each lateral ventricle; serum in the spinal canal. The great intestines thick, and rather contracted. Mucous membrane thrown into longitudinal plaits, and purple from excessive vascularity, which was greatest on the ridges, where there were several points resembling lymph.

30. Marcella Melia, æt. 16. *Admitted* December 15th, having been five days ill. Illness commenced during fever. *Symptoms.* Tormina; frequent green mucous stools, with blood; tenesmus; tongue white; skin hot; pulse frequent. 21st. Abdomen intolerant of pressure; pulse 120; cheeks

flushed. 23d. Languor. 25th. Stools pure blood ; lethargic ; hiccup. 26th. Pulse 144. 27th. Raving ; tongue dry ; thirst great. 28th. Face hippocratic ; involuntary stools ; short cough ; unable to expectorate. Died December 29th, on the 19th day. *Remedies. Super. Tart. Kali.* December 21st. *Hirudines. Mist. Cretæ. cum Rhei Pulv. &c.* *Dissection.* Large intestines united to the omentum in a thick mass. The mucous membrane universally ulcerated ; the ulcers with well defined vascular elevated edges, somewhat sloughy in their centre ; the peritoneum corresponding to these ulcers was highly vascular. The mucous membrane between the ulcers was of a dirty green colour.

SUPPLEMENT,

INCLUDING AN ACCOUNT OF DYSENTERY AS IT AP-
PEARED IN THE 79TH REGIMENT, AT LIMERICK,
IN THE YEAR 1821.

IN the years 1819, -20, and -21, during the autumn, there has been an evident disposition to dysentery among the inhabitants of Dublin ; but, when compared with its character in 1818, it has appeared

as a more tractable disease. In September 1819 five patients were admitted into the Whitworth Hospital, who, with one exception, recovered. The individual who died was in a hopeless state, and did not survive his admission more than a day.

In 1820 cases of dysentery occurred, and were rather more observable in private practice than in 1819. The disease in some few families existed in its severest form. I had an opportunity of witnessing part of its ravages in one family, the description of which, drawn up by my friend, Dr. Charles Johnson, of Anne-street, I shall here introduce. This narrative is valuable in many respects, but chiefly as it seems to establish the contagious nature of dysentery in this particular instance.

“Captain J. removed his family from the North of Ireland in the month of September 1820, in consequence of the death of his eldest son from pulmonary consumption. The change of scene, he hoped, would more quickly dispel the gloom which hung over his family. After remaining a few days in Dublin, they took up their residence about four miles distant, at Wilbrook, near Rathfarnham, on the 20th September.

Four days after, Miss J. (No. 1.) was attacked by dysentery. Medical advice was not procured till the 30th, and on the 3d of October she died. As far as I could learn the dysentery terminated in enteritis.

Miss M. J. (No. 2) was slightly affected at the same time, but in the anxiety occasioned by her sister's illness and death, the symptoms were either suspended or overlooked. On the 4th she and Mrs. J. removed to the house of their friend, Mrs. B. Rathmines Terrace,* about three miles distant from Wilbrook, and on the 6th I was called to visit her. She complained of violent pain in the belly, chiefly at the umbilicus, and in the hypogastric region, with tenesmus, and frequent bloody stools: there was, however, no fulness nor tenderness of the abdomen; the pulse was 100, full and hard, and her tongue slightly furred. She had taken castor oil on the 4th, and repeated it on the 5th, both of which doses operated freely, without relief; on the contrary she experienced a great increase of suffering after the second dose.

She was blooded on the 6th, 7th, and 8th. Calomel was largely exhibited, guarded with a sufficient quantity of opium, to prevent its passing off by the bowels. The mercurial plan was laid aside on the 10th, and in its room were substituted draughts, containing ten drops of the balsam of Copaiba, every second hour, interposing occasionally, as the bowels required, a solution of Epsom salts in infusion of cascarilla.

* Rathmines is the outlet of Dublin, most celebrated for the purity of its air and dryness of its situation, and hence patients labouring under diseases of the lungs are generally sent thither.

Suppositories of opium were used, and the spirit of nitrous æther in almond milk, to relieve strangury, which had become very distressing.

Finding that the disease was not checked by these means, sulphate of zinc was exhibited in pills, each containing a grain, one of which was taken every hour, and a second blister applied to the abdomen. All these means, however, proved insufficient to check the progress of the disease, which daily increased in violence, and terminated in her death on the 17th of October.

It may be well to remark, that on the 13th and 14th, an apparent mitigation of symptoms took place; the discharges became more natural; the pain and tenesmus less distressing; the tongue began to clean, and the pulse became less frequent. At this period the mercury seemed to be taking effect, as her gums appeared spongy, and she complained of some uneasiness in her teeth—the affection of her mouth subsided the following day and the disease resumed its progress.

Dissection. The liver was perfectly healthy; the gall bladder contained some light coloured bile. The stomach was a good deal distended, and contained some dark brown fluid. The small intestines were more vascular than usual, but their structure did not otherwise appear to be changed. The mucous membrane of the large intestines, throughout its whole extent was thickened and uneven; its sur-

face was irregular and warty, and presented a mottled appearance. The thickening and induration increased as we approached the rectum, at which part lymph had been thrown out on the inner surface of the intestines; but in no part was there any trace of ulceration. The rectum was so much thickened, that when cut across it did not collapse, but remained open like the mouth of an artery.

Mrs J. (No. 3.) was attacked with symptoms of dysentery on the 6th of October. The mercurial plan was steadily pursued in her case; in addition to calomel and opium, mercurial ointment was rubbed in night and morning; and the soreness of the mouth was kept up throughout her illness; which, however, did not completely subside until some time after her removal from Rathmines to the country.

The tenesmus, which was very obstinate and distressing, was relieved by anodyne draughts, opiate clysters, and the frequent application of leeches to the anus, which always produced a temporary relief. The bowels were kept open by a solution of Epsom salts in infusion of cascarilla.

On the 10th of October the servant (No. 4.) of Mrs. B. the lady to whose house the J. family had removed, was attacked with bloody stools and tenesmus, unaccompanied by fever, and was relieved in a few days by the use of the crystals of tartar.

On the 12th Miss B. (No. 5.) who was unremitting in her attendance on Miss M. J. was seized with symptoms of dysentery, which yielded to a similar plan of treatment.

On the 17th Mrs. J.'s servant (No. 6.) had a similar attack, which continued three days.

All these attacks were without any fever accompanying them. On the 24th, however, Mrs. B. (No. 7.) was herself attacked, and the fever was so considerable that she was unable to leave her bed for nine days.

Captain J.'s house at Wilbrook lies very low. At the end of the lawn is a river, which is at least ten feet above the level of their parlours, and the adjoining ground is swampy.

It is remarkable, that though dysentery was prevalent in different parts of Dublin, it was not known at Rathmines beyond Mrs. B.'s house; nor could I discover a single case in the neighbourhood of Wilbrook, though every possible enquiry was made.

Mrs. J. attributed the illness of her daughters to a damp and uncomfortable bed which they got on their journey up to Dublin.

Captain J. the only individual who escaped, came to lodge in Dublin when his family left Wilbrook,

and was not allowed to visit them at Rathmines."

In the month of August 1821 cholera was very prevalent in Dublin; in the 28th of August I saw either four or five persons, who were attacked on the preceding night with cholera. In the end of September there were many severe cases of dysentery in the hospitals, some of which commenced with symptoms of cholera. I also saw several cases of dysentery in private practice, two of which were from Limerick. When these patients came to Dublin their dysentery was in the chronic form; both were apparently cured by pushing mercury to the point of slight salivation.

In Limerick dysentery began to prevail in the latter end of May, or beginning of June; and although no class of the inhabitants altogether escaped from its attacks, it was most general and severe among the lower orders, especially those who dwell in that part of the city called Irish town, particularly in Palmer's town, in Margaret's-street, and the surrounding lanes. When it first appeared the mortality was considerable, and it proved fatal even to the young and robust, who neglected its first symptoms. By the kindness of Dr. Renny I am enabled to lay before the reader an excellent account of the disease as it appeared in the 79th regiment, which was drawn up by Dr. Perston, the Assistant Surgeon to that distinguished corps.

ANSWERS TO QUERIES TRANSMITTED FROM THE ARMY
MEDICAL OFFICE, 28TH SEPTEMBER 1821.

BY D. PERSTON, M. D. ASSISTANT SURGEON TO THE 79TH REGT.

No. 1. An account of the condition and previous health of the regiment ?

The condition and previous health of the regiment was good, no serious disease having occurred during the preceding month, with the exception of three cases of continued fever, and two of pneumonia.

No. 2. How accommodated in Limerick ? State of quarters and barracks ?

The whole of the regiment is stationed in the new barracks, except a detachment of thirty-eight men, quartered in the Castle barracks. The situation of the new barracks is elevated, and, I think, may be considered healthy. The chief objections to that building are the want of windows in the rear, by which thorough ventilation is prevented ; and the want of kitchens, whereby the men are forced to cook all their food in the rooms where they sleep. The immediate contiguity of the soldiers privy is a source of almost insufferable nuisance in some of the rooms, during hot weather.

No. 3. General health of the inhabitants of Limerick ?

Dysentery was very prevalent among the inhabitants of Limerick during the summer months, attacking all classes ; but the poor, who lived in the confined, narrow, filthy lanes and streets, were the chief sufferers, and numbers died. It was not equally prevalent in all parts of the town, at the same period, but seemed to move from one district to another. I am informed that some cases appeared so early as the month of November last ; these are said to have originated in the neighbourhood of the large slaughter houses, after an immensity of offal had been thrown out, and exposed to the action of the atmosphere. I understand the disease has disappeared, or nearly so, and that the inhabitants are now generally healthy.

No. 4. An account of the rise, progress, and probable causes of dysentery in the 79th regiment ?

The first case of dysentery in the regiment was reported on the 15th of June last, in which month twenty-three men were admitted into hospital labouring under that disease. In the following month the number admitted was fifteen ; in the month of August six, and in September only three. Of these five were relapses. No case has been reported since the 8th ultimo. It will be seen from the Table that the disease made its greatest advances during the first fifteen days, and that from the commence-

ment of July the number of cases gradually diminished.

With regard to the causes, which acted in producing the disease in question, nothing certain, I believe, has been assigned. The most probable, I am inclined to think, was the intense prevailing heat of the days, and the cold and profuse dews of the nights, at the time it first shewed itself; together with some unknown peculiarity of the atmosphere. Several of the men were seized with the disease while on guard, during the night, in the neighbourhood of the gaol, where there is generally a great accumulation of all kinds of dirt and filth. Other sources of the disease might be regarded in the noxious exhalations arising from the filth collected in the confined narrow streets; in the effluvia from the banks of the Shannon, the stream having receded considerably during the long continued drought; and to these may be added the too liberal use of pernicious spirituous liquors; for those addicted to irregularities were remarked to be the principal sufferers, though in several instances this could not be imputed. The disease had decidedly nothing contagious its character.

No. 5. Medical history of the disease, and method of treatment?

In this complaint the patients were first seized with a sense of uneasiness, or wandering pains in the bowels, quickly followed by severe griping and tender-

ness over the abdomen, particularly in the lower part, with frequent scanty evacuations of slimy feces, intermixed with mucus and blood; tenesmus; feverish heat, with frequent, generally hard or sharp, pulse; thirst, and in some cases nausea and vomiting of greenish bilious fluid. As the disease advanced stranguary came on, with increased inflammatory tenderness and tension; acute pain was generally experienced in the course of the colon, particularly in its ascending portion, and great suffering from excoriation, and sensibility in the anus and rectum. In all the fatal cases (though this was by no means always a fatal symptom) the evacuations became similar to the washings of bloody meat; these were very frequent and very fetid, and attended with much and protracted straining; extreme prostration of strength, and emaciation took place. At last the evacuations were voided unconsciously; hiccup, with frequent vomiting of dark green fluid followed, the alvine discharges being tinged with the same fluid; the extremities gradually became cold. In this state the unfortunate patient perhaps lived two or three days, then death put an end to his sufferings, his mental faculties being perfect throughout.

In the course of the disease there was great extrication of air in the bowels, inducing much uneasiness; and in several cases, in the advanced stages, a great variety in the appearance and consistence of the evacuations was observed in the space of a few hours, one consisting almost wholly of natural feces, the next being similar to beef washings, and a third

containing slimy, mucous, and bloody fluid, &c. In some instances, even of those which terminated fatally, the patient endured little acute suffering throughout the disease.

In conducting the treatment, the most active and decided measures were immediately adopted to subdue the inflammatory action ; from thirty to forty, or more, ounces of blood were instantly taken from the arm ; hot fomentations were applied to the abdomen, or the patient was put into a warm bath, and a solution of salts and tartar emetic directed to be given in small doses every hour, which generally produced discharges from the stomach as well as the bowels ; these were generally attended with a favourable result : the griping pain and tenderness were overcome ; the blood ceased to appear in the stools ; a dose of the compound powder of ipecacuanha, aided by the warm bath, or fomentations, usually produced moisture over the body ; and the patient perhaps felt permanently relieved ; too frequently, however, this relief was only temporary, and all the unfavourable symptoms recurred with as much violence as before. General bleeding was again employed, and repeated as the urgency of the symptoms seemed to demand. Small doses of neutral salts were administered, together with fomentations. Emollient injections and local bleeding and blistering were had recourse to ; the blood drawn invariably shewed the inflammatory covering.—These means in most of the cases checked the violent action of the arterial system, and removed the

local pains ; but notwithstanding the most pointed attention to the state of the bowels, the restriction of nourishment to fluids, thin flummery, and other simple substances ; the disease in a majority of cases repeatedly returned, and the strength of the patients having become greatly exhausted from the previous treatment, general bleeding could no longer be put in practice. Leeches were therefore the chief substitute, assisted by fomentations, blisters and emollient glysters. In the course of a protracted disease, the medicines were, of consequence, varied to meet existing circumstances : Dover's powder ; small does of calomel and ipecacuanha ; of rhubarb and calomel ; of calomel and opium, &c. &c. but the most successful in the chronic form of the complaint was a combination of the blue pill, tartar emetic and opium ; at the same time exhibiting tonics, such as the infusion of quassia, colombo, &c. The latter was also given during convalescence. The purgatives in most frequent use were the sulphate of magnesia and castor oil. Draughts containing carminatives combined with magnesia and rhubarb were attended with advantage, when flatus had collected in the bowels. In all the severe forms of the disease, after premising general evacuations, and when the inflammation was checked, mercurial frictions were ordered over the region of the liver. I was led to try the effects of this remedy, in consequence of having witnessed that the structure of that viscus was more or less destroyed in every fatal case of this disease, though it had been specially remarked, that no feeling of

pain—not even a sense of weight or uneasiness had been referred to that organ by the patients (but this will be more particularly noticed when I come to state the appearances on dissection); but the advantages accruing from this plan were not so extensively beneficial as I had anticipated, though in several instances I had reason to attribute the patient's recovery to the action of this medicine. Astringents and absorbents in conjunction with aromatics and cordials were indicated in severe cases, with starch glysters and opium.

All the patients who had laboured under this disease, previous to their being discharged from Hospital, were provided with two flannel waistcoats, and excused night duties till their strength was perfectly restored.

No. 6. The appearances on dissection ?

The diseased appearances discovered on inspection of the bodies was very much alike in all. The chief seat of disease was in the colon, the coats of which were found greatly thickened, with strong marks of inflammation—portions of the gut, in some cases, approached a scirrhus state; the passage at this part being much narrowed. Part of the ascending colon generally adhered to the peritoneum, and there the disease had made greatest progress—it felt thickened, and was dark coloured. The rectum was also in general thickened, and its inner coat much destroyed by ulceration. The

small intestines were more or less occupied with red vessels, and parts exhibited a dark livid appearance. In one instance the omentum was firmly attached to the peritoneum, nearly in its whole extent, and in some parts pus had formed between the two membranes.

The mesenteric glands in some were greatly enlarged, and converted into a firm cheesy looking substance.

The stomach was always found about half-full of dark green fluid, and fully distended with flatus; the coats seemed healthy.

The liver was invariably deeply engaged in disease; in general considerably enlarged; and its whole structure apparently destroyed. In two cases the surface was studded with large yellowish white spots, which on cutting into them were found to contain pus, and yellow purulent matter was found in distinct cells throughout its whole extent. The concave surface commonly presented a livid aspect, and was indurated. The gall bladder usually nearly empty.

Limerick, Oct. 3, 1821.

Table showing the Dates of Admissions, Discharges, and Deaths from Dysentery, in the 79th Regiment, from the 15th June to the 1st Oct, 1821, inclusive,

Dates.		Admissions.	Discharges.	Deaths.	Convalescents in Hospital.
1821.					
June	15	2	0	0	
	16	2	0	0	
	17	3	0	0	
	18	3	0	0	
	19	1	1	0	
	20	2	0	0	
	21	1	0	0	
	22	4	1	1	
	23	1	1	0	
	25	1	1	0	
	27	1	1	1	
	28	1	1	0	
	29	1	3	1	
July	1	1	3	0	
	3	1	0	0	
	4	1	0	0	
	5	2	0	0	
	8	1	0	0	
	9	0	2	0	
	10	0	2	0	
	14	1	0	0	
	16	1	0	0	
	17	0	1	0	
	19	0	1	0	
	22	1	0	0	
	23	0	0	1	
	27	1	0	0	
	28	2	0	0	
	29	1	0	0	
	30	0	0	1	
Aug.	31	1	1	0	
	1	1	1	1	
	2	0	1	0	
	3	0	3	0	
	5	1	0	0	
	7	0	1	0	
	8	1	1	0	
	9	1	0	0	
	10	1	0	0	
	11	0	2	0	
Sept.	12	1	0	0	
	20	0	0	1	
	21	0	1	0	
	25	0	0	1	
	1	1	0	0	
	3	1	0	1	
	4	0	1	0	
	7	1	0	0	
	8	1	0	0	
	10	0	1	0	
	11	0	2	0	
	17	0	1	1	
	24	0	0	0	3
Total		47	34	10	3